## LIGHTING SOUND International



A SCENE FROM OLIVER! AT THE LONDON PALLADIUM

PHOTO: MICHAEL LE POER TRENCH

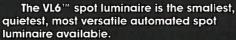
- Oliver! Robert Halliday joins the technical team at the London Palladium
- Make Space! Ian Herbert on Manchester's major theatre design exhibit
- Harman Audio: a profile of the sound giant's UK distribution arm
- Going Interactive: a night out with Veronica in Utrecht
- Superstar Rene Froger live at the Ahoy in Rotterdam
- Club Review: new looks for the New Year

**JANUARY 1995** 

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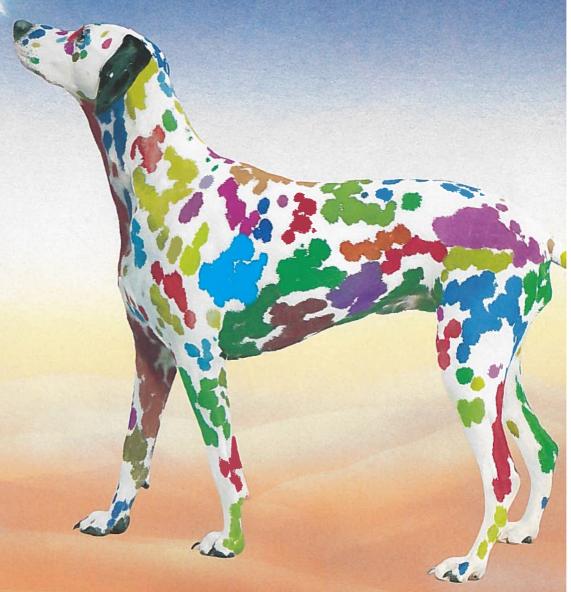
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All other worldwide patents granted or pending

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## LIGHTING SOUND News

#### The 'Prince of Darkness' Dies

Robert Nesbitt was proud of this description of him, although he always clarified that it emanated not from his style of lighting, full of chiaroscuro as it was, but from his 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, maintaining "you don't get results by shouting or throwing fits of temperament". He was at all times

dignified, earning deep respect, and devotion from all who worked with him. Throughout his life he remained a prolific theatre-goer and was still consulted by impresarios and composers; he was a regular figure at PLASA and ABTT Trade Shows at which he showed a keen interest in the latest technology, writing in one L+SI of his enthusiasm for the latest remote control luminaires. Up until his death earlier this month he continued to participate actively in the industry as President of the Association of Lighting Designers.

His technical contribution to live entertainment is considerable but hard to detail because, whilst



This important photograph was given to L+SI by Jack Lawrence. It shows Robert Nesbitt during a break in rehearsal at the London Casino in the 1950s where he was producing and lighting 'Latin Quarter Review'.

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. Certainly his drawings covered every aspect of a production from foyer and auditorium decor, to programme and set design, and in his early days his contribution also included lyric writing of considerable versatility and wit.

The style he imparted to his productions was unique, and for those who saw them and worked on them, they remain an unequalled pinnacle.

Graham Walne

## Membership Races Past the 300 Marker

As L+SI went to press early in January the membership count of PLASA - 95-style - had reached 306, which includes 44 members of the former Sound & Communication Industries Federation.

The total includes 221 full voting members, 20 corporate members and no less than 65 international associate/corporate members from 21 different countries.

Association Chairman Mike Wood, who has chaired the membership working group for the past three years, commented: "The strong body of members now within PLASA bodes extremely well for the future. With a steady income from our Show, membership subscriptions and publications, and the determined interest of a vital membership we can not only go on to achieve a great deal in the way of services for the members themselves but also take action to enhance the prospects for the industry itself."

A full membership list (to date) is printed on pages 71-74 of this issue.

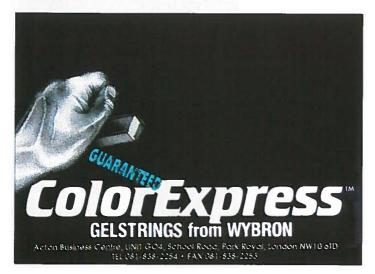
#### Backs to the Wall!

With the P&O Events sales team for PLASA Light & Sound Show 95 reporting 6000 square metres of stand space already sold for the September event, the back wall at Earls Court 2 is now well within sight as the event soaks up more and more space and marches on from one success story to another.

Demand for 'starter' stand space means that two small exhibitor pavilions will be made available at PLASA 95 - one each in the 'no sound' and 'background sound' areas. Following a sales trip to LDI at Reno last November interest for an all-American area under the auspices of trade organisation ESTA is also at a high level.

Show director James Brooks-Ward is currently working with PLASA's John Offord and the Association's executive committee to come up with a special scheme to further encourage manufacturers to launch their products at PLASA. More and more companies are using the Show for their annual launches and it is planned to devise a comprehensive list of incentives for them to do so and use PLASA as their regular international platform.

For exhibitor information contact Nicola Rowland on 0171-370 8179.





## Planned endurance

We live in a fast moving world where every year the pace of technology gets faster and faster. As an example just look at the capacity of today's low-cost PCs compared with a few years ago.

The same is true in the lighting business, particularly at the cutting edge in entertainment lighting and more especially with the more high-tech products such as robotic scanners. So, the question is, will your investment in automated lighting be rusting in the roof in three years time?

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#### The Touring Year . . .

Whatever the reasons behind the hesitation in the touring market at the beginning of 1994, they were more than overcome by mid summer. The onslaught of autumn left everyone a bit apprehensive, but late December remained encouraging. However, it's worth taking a closer look at what has happened during the last year.

All the really big events kicked off in the US - the Floyd, Phil Collins, more recently The Eagles, and, of course, the Stones, but I recall decided reluctance to crow too loudly when that last tour commenced, lest the seat polishers not arrive. The proof was in the pudding, which is kind of scary as it seems this Government was the source most credited with pointing out the advanced state of recovery in the US (and now they tell us ours is well under way!), no tour died a death and the promoters all look a bit more relaxed this Christmas. Sure enough, Britain followed suit and, despite Wembley Stadium staying dark all summer, the Arena Circuit positively blossomed in the Autumn. What does seem different is the nature of touring, and the creeping suspicion that ticket sales are still somewhat down on the heyday of six years ago.

Still, there's plenty more coming. LSD are chasing Rod Stewart and Bon Jovi; REM's stage set is under construction at Brilliant Stages and even Black Sabbath are lining up a tour. The interesting thing will be to see if Oasis and other bands of that ilk can make the jump to bigger venues. The Tea in the Park show in Scotland last summer was perhaps a good indicator, largely sustained by just this type of band. It also happened to be a wonderful exposition of lighting craft by a mystery LD, but that's another story.

Steve Moles

#### **School Opportunity**

If you dream of being a producer, and want to find out what it takes to make it to the top, then turn up at the Manchester School of Sound Recording at 10 Tariff Street, Manchester, on Saturday 4th February.

The Open Day will offer visitors the chance to find out more about the courses available, witness hands-on demonstrations and check out the wide range of sound and recording equipment. The staff at SSR are trained to offer advice on the best career path for students and will provide specialist training with courses that maximise learning capability, combining classroom theory and practical hands-on learning with the latest equipment, including six fully equipped in-house studios.

SSR has strong industry links with manufacturers including Harman Audio and Steinberg and also claims to be the training ground of many music business successess, including top groups such as Candy Flip and Simply Red.

For further details on the courses offered by SSR, telephone 0161-228 1830.

#### **VL Creates Irideon**

After almost a year of operation as a division within Vari-Lite Inc., the Architectural Division will begin operation as a separate company. The incorporation of Irideon Inc, is intended to better serve the needs of the architectural lighting market, with products and services specifically designed to address the unique requirements of that client base.

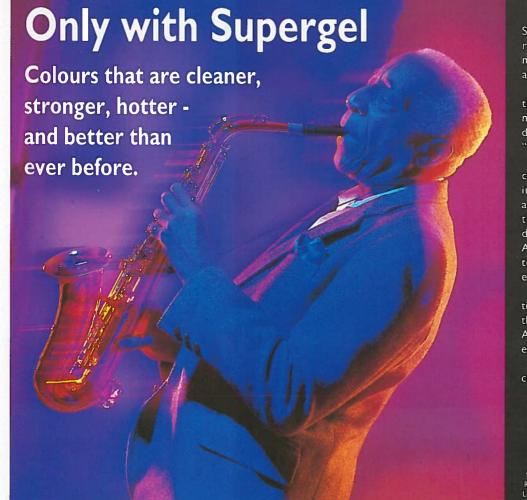
Vari-Lite Inc president and CEO Rusty Brutsché told L+SI: "It is necessary to establish a separate identity for our architectural products group as our customers, products and distribution will be different from Vari-Lite's current business of leasing automated lighting products. However, Irideon will be a wholly-owned subsidiary of Vari-Lite Holdings Inc. and will share the same business philosophy."

Rusty Brutsché will act as the president and CEO of Irideon and Robert Dungan has been named vice-president and general manager. Anne Valentino is national sales and marketing manager and Gina Yates is project co-ordinator.

Irideon will be headquartered at 201 Regal Row, Dallas, Texas 75247, USA. The company can be reached on +1 (214) 819-3208. European operations will be conducted from 20-22 Fairway Drive, Greenford, Middlesex UB6 8PW.

#### Laser Training Courses at WCC, London

Training courses for the safe use of lasers and other entertainment lighting equipment are being held in January at Wembley Conference Centre, London. The three complimentary courses will give practical guidance on interpretation of the latest Codes of Practice for installers, operators, events organisers, environmental health officers, fire and safety officers and lighting designers, and will take place on the 17th, 18th and 19th of the month. Further information is available from the Institution of Lighting Engineers, in Rugby, telephone (01788) 576492.



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#### **NEWS IN LIGHTING+SOUND INTERNATIONAL**

#### **Lightronic Licht & Lampen**





The new warehouse facility left, and Iain Price-Smith, Michael Schneider and Roy Millington at the official opening, right.

The official opening of Lightronic Licht and Lampen's new warehouse offices and showroom in Hamburg took place in the latter part of last year. The new 1000sq.m premises feature a large reception area, a nearby sales office and a showroom.

The company itself was first formed in 1983, and is an amalgamation of Uwe Selmert and Sony Christiansen who started Lightronic in 1978 - and Michael Schneider who formed Licht and Lampen in 1977. The three partners had previously worked together in various forms with Flashlight, and during that time they worked with such bands as Status Quo, Boney M, Manhattan Transfer, Canned Heat and Sammy Davis. The new company decided to work solely on importing products and sell through a dealer network.

As the three partners have been involved in the industry so long, they have had a strong list of manufacturers. They have fond memories of Henry 'Pass the 3-in-1' Fenton Weill, Lightomation, Altman, ICE and Dave Simms and must have invented grey importing when they sourced Optikinetics products through Lightomation! They have fond memories too of Zero 88 - LL&L first imported their products into Germany. They have also worked in close co-operation with the legendary lighting designer Udo Fisher, who surfaced again at the festivities.

With a staff of 10, the three directors run a tight ship and perform well for their current line-up of British manufacturers who include Cloud, whose managing director Roy Millington was at the opening, and Multiform who have been with Sony & Uwe since 1978, prior to the amalgamation in 1983. Iain Price-Smith was firmly in evidence with his partner in MEC Systems - Roland Sollner. L+L now represent Cloud, JBL, Multiform, Osram, Penn Fabrications, Program System, Phillips, General Electric, Radium and Ultimo, to name a few.

All the company's guests were treated to a special harbour trip in Hamburg on the following day which ended a business event that was also great fun. John Jeffcoat of Multiform reported to L+SI that unhappily there were no lap-top computers in sight, no white socks, no gel, and no grey shoes!

#### Wholehog II Flies In

AC Lighting have announced the forthcoming release of the Wholehog II lighting control system. The company hope that the new Flying Pig Systems desk will offer the theatre market a control system which will equal the success of the original Wholehog in the rock and roll touring market. The new desk is smaller than the original and features unlimited fully overlapping multi-part cues, all accessed and programmed via the familiar keypad, and will continuously output up to four different control protocols to accommodate fixture variations, thus eliminating the necessity of separately programming a series of linked controllers. Orders for the desk have already exceeded the total sales of the original. "It took two years to get the Wholehog firmly established," AC's Glyn O'Donoghue told L+SI. "We took a gamble and stopped manufacturing the original to allow us to concentrate on the new console, which we hope will have a much wider appeal." It seems to be paying off as AC have pre-sold their first batch of consoles following a positive reception at LDI in Reno, and are now well into selling a second batch.

#### **DLD Head for Heart of London**

In response to an increase in business activity and a need for more space, DLD Productions are relocating. Andy Neal sees the move as a positive indicator that 1995 is going to be a busy year for the company. From mid-January, DLD can be reached at 66 Waldeck Road, Strand-on-the-Green, London W4 3NU, telephone 0181-747 4747.

#### More Magic from NJD's Wizard

NJD Electronics have announced that the Merlin DMX Lighting desk, first shown at PLASA 93, and since re-designed to include further customer specified features, is now available. The new prototypes were shown at PLASA 94, following which the first production models were released onto the market at the end of last year.





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takes place in Frankfurt from 8-12 March 1995, there are plenty of good reasons for visiting the fair. Nowhere is a wider product range on offer, more international exhibitors on show - last year there were already 1,250 exhibitors from 38 countries - and nowhere are the conditions for doing good business better. This is because the Frankfurt International Music Fair presents the entire spectrum of products. Musical instruments, sheet music and accessories as well as professional lighting, sound and stage equipment. And to help you plan a successful visit to the fair a wide array of information on "the sound of business" is already available. By fax or by post.

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#### Pearl's Debut Gig



The new Rolacue Pearl console from Avolites was recently out on its fist gig at The Three Crowns pub in Heaton Norris, near Stockport. The band pictured performing above are Bagshandy and were being lit by Howard Dean from Keylight Theatre Services with one of the prototype Pearls. The desk was controlling Pars, scrollers and Trackspots. As Dean explained to L+SI: "I can't think of any lighting situation where it wouldn't be appropriate, as it covers everything you could want." The Pearl is now in full production.

#### **Seminar Success**

Towards 2000 Inc, of Burbank California, report that their Intellabeam Seminars which were held in late '94 were a great success, and more seminars are now planned for every month of 1995. Further development of the seminars will include High End's Cyberlight and Status Cue, as well as the Martin Roboscan line of moving light fixtures. For more details on the full programme contact Jeff Harvey at Towards 2000 in Burbank, telephone +1 (818) 557-0903

#### **CPL Spread to Dallas**

Concert Production Lighting (CPL) has announced the formation of a Dallas-based operation, Concert Production Lighting Inc to service the North American and International touring markets. Following close on the heels of CPL's highly successful US 'Voodoo Lounge' tour for the Rolling Stones, and prior to that Pink Floyd's 'Division Bell' tour, the move is timed to continue the momentum already gained by the company in the international field.

CPL is the concert touring arm of Greenfordbased Theatre Projects Lighting Services (TP) and is part of the Vari-Lite Europe Holdings Group formed in April 1994. The US expansion will operate from the Dallas premises of its parent company, Vari-Lite Inc and will be managed locally by Wayne Boehning who has been involved in the strategic planning for the move since early 1994.

With effect from 1st January 1995 his operation will be strengthened by the addition of resources and staff, including Bill Martin. Both Boehning and Martin are veterans of the 'first division' touring scene, having held senior lighting and production positions with an impressive list of bands including Paul McCartney, Pink Floyd, The Rolling Stones, Genesis, George Michael and Paula Abdul. They will work very closely with their London-based counterparts, Carol Croft and Dave Keighley.

As with the UK-based companies in the group, CPL Inc's close association with the Vari-Lite organisation will offer its clients world-wide access to the technology systems, products and support of the parent company.

#### **Gogler Lys Supply IDs**

As a result of the presentation of the ID dimmer at the 1994 PLASA Show, Gogler Lys have supplied six Zero 88 ID racks to the Danish TV1 based in Aarhus, to be used as additional studio dimmers and for outside broadcast production. The ID was chosen for best overall performance



L-R: Erik Larsen and Niels Svarrer of Gogler Lys.

after a test-race with five other brands. Gogler Lys also supplied TV1 with four Clay Paky Super Scan Zooms, two Pani BP4 Compact projectors, four Smoke Factory machines and a Scancommander from MA Lighting.

The delivery to the studio completes a year of progress for Gogler Lys. Other landmarks have been the installation of the first Arri/ETCNet in Europe for Aalborg Kongrescenter (with an Arri Imagine 600), the supply of six Robert Juliat followspots (Aramis and Pixie) for The Royal Theatre and the appointment of the company as exclusive service partner for 'Copenhagen 96'.

#### **HHR at NAMM**

HHR Communications will be showing their Portadat range of DAT recorders at the NAMM Convention in Anaheim, California, from 20th - 23rd January, and at the AES '95 Convention in Paris, from the 25th - 28th February.





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#### Miss Saigon Opens in Stuttgart

At the end of last year Miss Saigon became the longest-running musical ever at the Theatre Royal in Drury Lane. The show opened six years ago and looks set to remain there for some time. To coincide with this sixth anniversary, another production of Miss Saigon opened in Stuttgart in a vast new theatre complex, where it is expected to run for 10 years. The auditorium and complex was built entirely for and around Miss Saigon, and cost £200 million.

British input was in evidence in the lighting and sound installations, and the show once again brought together the expertise of Andrew Bruce and Autograph Sound for the sound design

and David Hersey and DHA for the lighting. Inevitably, the first product on Hersey's wish list was 30 of his own company's Digital Light Curtains, including two of the shorter six-lamp units, which are getting their first taste of theatre work with Miss Saigon. DLCs were first used on the New York production and have, of course, been used on every production since. Stuttgart is also using a Light Talk splitter to divide up the Light Talk network controlling the DLCs. An indexing yoyo is employed in a CCT Silhouette to produce the famous rising sun effect which opens the show. DHA have also supplied a range of pre-distorted slides for further effects projection. Incidentally, all the gobos designed by DHA specifically for the various productions of Miss Saigon have now been added to their catalogue.



The refurbished theatre auditorium, above, and the Freizeit-und Erlebniscentrum complex in Stuttgart, below.



In addition to the DLCs, ADB luminaires and a mix of Vari-Lite VL4s and VL5s provided the effects lighting, with five Pani 5k projectors also in the equation. The Vari\*Lites were being run through new software on a Macintosh Powerbook PC, whilst

the rest were channelled through AVAB's Viking desk, part of the resident house system.

A mixture of Meyer speakers provided the sound relay. The basic orchestra system consisted of four MSL-2s and two USWs, whilst for the main vocal system, 16 UM1s were used in tandem with UPMs for delays. Guiding all of this was a 76-channel Cadac using BSS parametric digital EQs. 22 Sennheiser radio mics were specified for the cast, whilst for the famous helicopter sequence a separate computer-controlled flying fader system using an S3000 sampler was run through a separate digital sound desk.

The opening of Miss Saigon, and the cosseting of the show, is further proof of the Germans' love of the West End musical, which is enjoying something of a rennaissance at the moment. Starlight Express has been running since the mid-eighties at a theatre specially built for the show, Phantom is now on in Hamburg, and a theatre is being specially built for Les Miserables in Duisberg to open at the end of this year. Buddy has just premiered in Hamburg and new theatres are also being planned in Dresden and Berlin.

Laser Magic have asked us to point out that they were the suppliers of the lasers and special effects equipment on the set of the Big Picnic (L+SI, October 1994) and not Laser Creations as mentioned in the article. Laser Magic supplied an LM Odyssey 8-scanning system and the new Purelight Star system from Coherent. The company have also informed us that they are the new European dealers for Pangolin laser products from the US, and have expanded their overseas operations by adding Abu Dhabi, Bahrain and Singapore to the list.

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to provide a seamless coverage area with minimal overlap between adjacent cabinets. Axehead also increases system efficiency, power output and intelligibility - particularly in the ultra-critical mid-range frequencies.

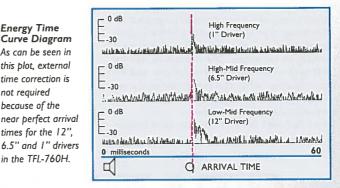
Like Flashlight, FLOODLIGHT also features a three-way mid/hi enclosure (TFL-760H) with the industry's widest mid-bandwidth from paper cone drivers. Loaded onto a new generation Axehead device, a high-power 12" delivers impressive low-mid reproduction from 180 Hz to 1.3 kHz. A truly revolutionary 6.5" proprietary paper cone driver is loaded onto a specially-designed, hi-mid Axehead device and provides exceptionally clean response and projection up to 8 kHz! Lastly, a proprietary waveguide horn coupled to a 1" titanium compression driver handles high frequencies to 20 kHz. Depending on user requirements, a choice of sub-woofers is available, including one utilising our 6" voice coil, 600 Watt RMS, 21" bass driver as used in Flashlight.

Since all transducers in a single TFL-760H are mechanically aligned and in-phase, external time correction is not required (see ETC diagram).

Worldwide, live sound engineers have praised the smoothness of

Energy Time Curve Diagram As can be seen in this blot, external time correction is not required because of the near perfect arrival times for the 12",

in the TFL-760H.



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\* Winner, "LIVE!" magazine 1993/1994 Live sound Loudspeaker Award Floodlight is manufactured by Turbosound under licence from Funktion One.



#### Soundivision Announce Exclusive Deals with CP&P and Roland



Left to right are David Graham of Soundivision with a Pulsar trio of Ken Sewell, Derrick Saunders and Jane Dorling, and John Lethbridge from Cerebrum and Kelvin Graham from Soundivision.



Soundivision's David Graham (right), drinks a toast to the Roland agreement with Roland UK's managing director Brian Nunney (centre) and Fred Mead.

Soundivision, of Islington, North London, have announced two exclusive new deals, having become the sole showroom supplier of the award-winning range of Clay Paky & Pulsar lighting products, as well as sole distributor of Roland's range of DJ and discotheque products.

The announcement was made at a special press reception at Soundivision's new 2,400 sq.ft premises in December. The company's role for CP&P will be primarily to serve London and the Home Counties, while also providing a focal point for viewing, with full demonstration facilities for international visitors to London.

Soundivision have for some time been looking

to forge an alliance with a lighting effects and lighting controller manufacturer, to gain a foothold in what MD David Graham sees as an increasingly fierce and competitive field. He had been in contact with Derrick Saunders and the Pulsar team since Soundivision was created four years ago, and following discussions at PLASA 94, it was agreed that the time was now right for an alliance between the two companies.

To commemorate the appointment, David asked Pulsar's Derrick Saunders and Jane Dorling to unveil a special plaque.

The new agreement with Roland comes after 18 months of close association. The two companies

shared a stand at PLASA 93, and Soundivision have been responsible for the marketing of the Roland DJ70 sampling station since August 1993. The DJ70 has become a standard piece of equipment at First Leisure venues, and was also nominated in 1994 for the BEDA Sound Award, and was chosen as runner-up.

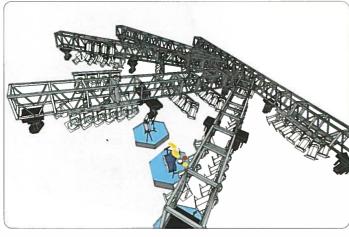
Recent additions to the Roland range include two new products - the MS1 digital sampler and the JS30 sampling workstation.

Soundivision's new headquarters is at 383-385 Liverpool Road, Islington, London N1 1NP. The company can be reached on telephone: (0171) 281 8121 or fax (0171) 609 1310.

## STARDRAW 3D







Starlite Systems Techology Ltd

Design, Manufacture and Hire of Automated Lighting Systems. South Eastern House, 1 Knights Road London E16 2AT

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©1994 Starlite Systems Technology Ltd. All rights reserved ®Microsoft Windows is a registered trademark of Microsoft Corporation Stardraw 3D is a powerful, standalone 3D Computer Aided Design package which runs under Windows 3.1 and enables designers to create stage sets, lighting designs, and detailed presentations. Included is a large library of lighting equipment and trusses, so you can quickly produce highly detailed plots. You can also use the built-in editor to create your own libraries.

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£595







#### **NEWS IN LIGHTING+SOUND INTERNATIONAL**

#### **DAMSTY Donation to Deaf**

Members of the DAMSTY Committee, Soundtracs' John Carroll and PLASA's Ken Walker, recently handed a cheque for £8,750 to Shirley Metherell, founder of the Elizabeth Foundation, a Portsmouth based organisation caring for pre-school deaf children, the chosen benefactory of DAMSTY's charity fund-raising efforts.



Left to right: John Carroll, Ken Walker, Shirley Metherall.

Last year's DAMSTY sailing

event had already raised around £4,500 for the Elizabeth Foundation who were able to fund the building of a superb new sound studio, used for educational purposes. Next year's event is expected to be held once again in September, with applications for boats already being received.

#### **Lightfactor Host Seminars**

Between February 6th and 10th this year, Lightfactor will be hosting a series of comprehensive training and programming seminars. These will include Cyberlight, Intellabeam, Trackspot and Dataflash technical training and programming with LCD Controllers and the Status Cue console.

The seminars will run from approximately 10am to 6pm in Greenford, and there will be a charge of £55 per day that will include buffet lunch and refreshments. Two and three day packages are available at £100 and £150 respectively, and rooms at the nearby Bridge Hotel can be booked at the same time if an overnight stay is required.

In addition to the training and programming seminars, Lightfactor will continue the tradition of their informative, hands-on sessions by holding two Status Cue open days on the Thursday (9th) and Friday (10th) of the same week. These will be free of charge and take place at Lightfactor's HQ in Greenford.

For more information contact Lightfactor in Greenford, telephone 0181-575 5566.

#### **Designs on Dublin**

Lighting Dimensions of Dublin supplied a complete lighting rig based around 10 Clay Paky Golden Scans and 50 Scrollers for the 1994 Smirnoff International Fashion Awards, held in Dublin in November. The televised show gave 29 young fashion designers from around the world the chance to compete internationally for the Young Designer of the Year award. Each country's entrants entered designs based on a different theme, and consequently the show called for 29 different lighting scenes and maximum versatility of the lighting rig.



#### John Hornby Skewes Expansion

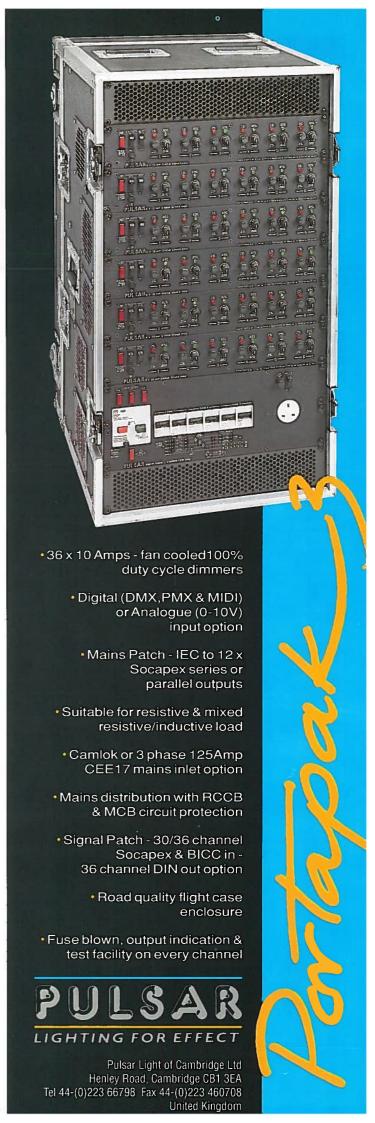
John Hornby Skewes are adding another 8,680sq.ft of storage space to their existing ground level warehouse space of 13,300sq.ft.

JHS are UK/Eire distributors of Hughes & Kettner amplification, Ross sound reinforcement systems, Chiayo radio-microphone systems, Guyatone, George Dennis and Rocktek effects, Rocktek amplifiers - and a comprehensive host of other instruments and accessories.

The extension is due for completion in March 1995.

#### Stars in the Arms of Morpheus

Morpheus Lights, of San Jose, California, ended 1994 with a busy schedule. They currently have lights on tour with Reba McEntire (LD: Peter Morse), Anita Baker (LD: John Osborne), Barry Manilow (LD: Jack Albeck), Julio Iglesias (LD: Peter Morse), Beach Boys (LD: John Rossi), and Kenny Rogers (LD: Jess Metter), as well as providing the lighting for Disneyland's Candle Light Show (LD: Brian Gale), Nancy Kerrigan's Ice Show Special (LD: Greg Brunton), and the Inaugural Gala for California's Governor Pete Wilson (LD: Bill Klages). Several new tours are already planned for the New Year.



#### **LETTERS**

Dear Editor,

#### Invisible Lights on Broadway

I enjoyed Richard Knight's article on automated lighting on Broadway very much. However, he cannot be allowed to get away with his assertion that "the only company with automated lights on Broadway is Vari-Lite Inc." He should know better, working on Sunset Boulevard, but perhaps he didn't notice since they weren't connected to his Artisan - DHA's very automated Digital Light Curtains are in more than a quarter of the musicals listed including Sunset Boulevard. Others include Miss Saigon, Beauty and the Beast and Showboat - which has the even more automated pitching version!

Philip Nye - DHA Lighting

#### Masterpiece Upgrade

Pulsar have announced the availability of free Masterpiece software upgrade kits. The latest software for the Masterpiece 48 is version 1.85, while the latest for the Masterpiece 108 is 2.0. Version 2.0 enhances the Masterpiece 108's theatre and live section. The AB Master sliders are now fully operational with powerful, yet straightforward facilities.

There are additional features for the scene and scene chase fade times, while joystick velocity allows the operator to use Scans as followspots. Keyboard action gives the possibility of 54 keyboards, rather than just 18.

Upgrade kits are available from the Pulsar sales office in Cambridge, telephone (01223) 66798.

#### Philips Aim High



In mid-December, for the third consecutive year, the tallest 'Christmas tree' in the world was spectacularly lit in Ijsselstein - a small town 15 kilometres from Utrecht, Holland. The 'trunk' of this 375 metre-high tree was formed by the NOZEMA (Dutch Broadcast Transmission Company) and PTT Telecom mast.

Philips Lighting donated a complete new lighting system, incorporating Mastercolours lamps. The installation consisted of 120 lamps with ballasts on the cables supporting the transmission mast. Mastercolour is the new, compact, high-pressure gas-discharge lamp introduced by Philips in early 1994 for the lighting of shop windows and interiors, hotels and public buildings. According to the company, it represents a breakthrough in light quality compared to the gas-discharge lamps previously available for this market segment. This excellent light quality, close to that of halogen, is achieved thanks to the application of a ceramic discharge tube.

#### Washlight's Debut

LSD's new WashLights have made their debut on the road with The Beautiful South.

At the creative helm is lighting designer Robyn Jelleff. In addition to the WashLights on the rig, she also had 19 Icons and a range of cyc units. The high tech show was controlled from the Icon desk. Jelleff, who has been a firm exponent of the Icon system since she first used it earlier in the year, decided to road-test the WashLights after her experiences with Icons.

The WashLight offers a virtually unlimited colour palette, and different lenses are available that range from very narrow to a wide beam angle (covering the full range of Par beams). A continuously variable beam spread lensing option, previewed at LDI, will be available for the production fixtures.

WashLight weighs less than 25lbs and enjoys unrestricted 360 degree pan and 270 degree tilt. Containing a custom-designed incandescent 575W lamp and reflector, it achieves high efficiency, according to LSD, with low power consumption.

#### **Aussie Appointment**

As a result of contacts made during the EnTech 94 Exhibition in Sydney, Australia, Studiomaster of Luton, England have announced the appointment of an exclusive distributor for their full range of audio products in Australia. The new distributor is Syntec International, 60 Gibbes Street, Chatswood, N.S.W 2067 Australia.



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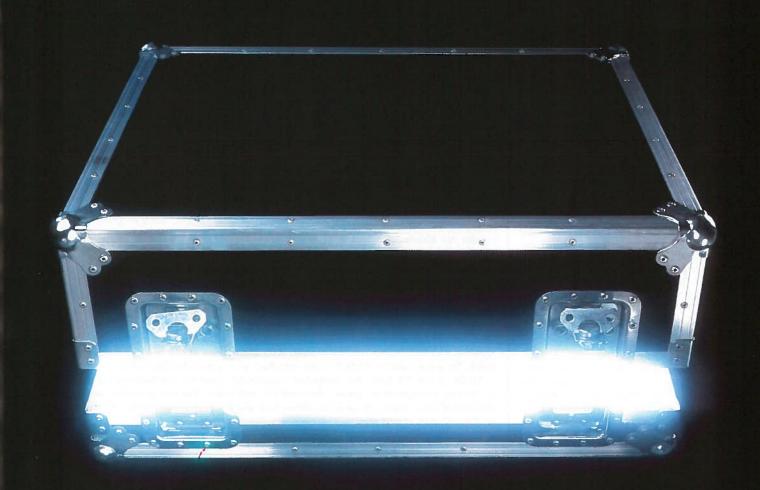
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#### Playlight Aid College



The Playlight Group has recently concluded a sponsorship agreement with New Wellington Technology College, a grant-maintained school in Timperley, Cheshire. The agreement covers the provision of products and services for the development of performing arts facilities. A work experience scheme has also been implemented.

The school is presently assisting Playlight in its development of new products for the education market, by involving students and teachers in the design and testing processes.

Our picture above shows Barry Hampson (left), commercial director of Playlight, presenting a commemorative plaque to John Knowles, head teacher of the college. Also pictured are Carole Bond of Playlight and John Hughes of New Wellington.

#### **RNT Get Concert**

The Royal National Theatre in London recently took delivery of the first Cadac Concert mixing console, commissioning it in the Lyttelton Theatre for autumn repertoire productions. Designer and manufacturer Clive Green & Co Ltd developed the sophisticated console over a three year period, focusing on providing new levels of automation and programmability specifically for live mixing applications. In addition to this first installation, the Concert was recently launched to the US market at the San Francisco AES Convention in

The RNT desk is specified with 30 inputs, 15 dc VCA masters and a 12 x 24 matrix. The current production cycle at The Lyttelton includes: The Children's Hour by Lillian Helman, Tennessee Williams' Sweet Bird of Youth and Broken Glass by Arthur Miller.

Concert Production Lighting (CPL) is lighting some impressive shows over the winter months, including one of the biggest shows staged in Russia this year - 'A Magic Night in America' - an ice spectacular for 14,000 people a night in Moscow's Sports Palace from December 26th to January 12th.
Produced by Richard Porter of Las Vegas

**CPL's Busy Winter** 

and promoted by Samant Corp of Moscow, the event offers Muscovites a feast of world class Russian and American skating stars who perform with state-of-the-art lighting, laser effects and costumes.

Lighting designer Jess Johnson, known for his work with Cher, created the lighting show using a combination of trussing and lights from Moscow-based suppliers and a large contribution from the Vari-Lite Group in London, and in particular CPL.

CPL is also involved in a string of major shows in the UK, Europe and America.

Completing a year which had already included work with Pink Floyd and the Rolling Stones, tours throughout November and December included Status Quo (LD: Pat Marks); David Byrne (LD: David Arch); Cliff Richard (LD: Mick Healey, Vari\*Lite operator Derek Jones); Gary Glitter (LD: Chris Clow) and Elkie Brooks (LD: James Judge Louden).

CPL has also been lighting a Miami 'Pay-Per-View' show by The Rolling Stones another date on the year's biggestgrossing tour. Two more prestige contracts this side of the pond were Sarah Bernhard's London Festival Hall shows and ZZ Top who hit Birmingham and London just before Christmas.

#### Tannoy in Ellie Jay's

Ten of Tannov's CPA12 and two CPA15 loudspeakers have been installed into Ellie Jay's -European Leisure's newly refurbished pub in Portsmouth.

Tannoy's contractor series were selected on the advice of Brent Davenport from audio and lighting experts Transit Sound and Light. Ellie Jay's required high performance loudspeakers that could be discreetly installed within the venue's challenging architecture, including split level seating and low ceilings.

Following the success of this installation, European Leisure has selected Tannoy's contractor series loudspeakers to equip a further venue in Norwich.

#### ESB Becomes PSA

Five months after their formation, the Entertainments Service Bureau has announced that it will be changing its name to The Production Services Association (PSA). The association has made significant progress since its formation in July, 1994.

Full membership now has an annual subscription of £250 and associate membership designed for freelancers is £50. PSA are looking for input and participation from associate members who will enjoy most of the benefits of full membership which include a democratic body to research major issues in the live music industry, organised first-aid training courses with Promed Medical Services, access to a specialist doctor who will give advice and help on problems relating to drug/alcohol dependency and discounts on trade publications.

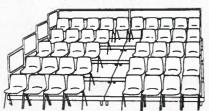
#### Labatts Apollo Refurbishment

By the close of February, Labatts Apollo in Manchester will have undergone a £350,000 refurbishment. The former cinema and variety hall, built in 1936, will have all its 1,655 seats removed and subsequently replaced with upholstered removable units. With the addition of two new fire escapes and 40 new toilets, the venue capacity when the stalls seats have been removed will be 3,486.

Apollo Leisure UK have also earmarked considerable funds for refurbishment of the foyer, and recarpeting throughout the ground floor and the auditorium. The first performer to appear at the refurbished venue will be Bryan Ferry. Shows have also been confirmed for the Orb and the Prodigy for the early part of next year.

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#### **NEWS IN LIGHTING+SOUND INTERNATIONAL**

#### **Followers of Fashion**



A last minute call from the BBC gave Stratford Acoustics the opportunity to bid successfully for the supply of sound reinforcement equipment for the Fashion Theatre at this year's Clothes Show Live, which took place in early December at the National Exhibition Centre in Birmingham. The BBC specification called for a system that would provide true stereo 'in the round', and would be capable of 110dB around the tiered seating and at floor level.

The original design specified a 27 metre octagonal box truss, to be hung above eight moving rows of lighting, but lack of availability dictated that a small circular triangular truss would have to be used. Suspended from this were 16 positions comprising a SAT3WII cabinet, a SATCX12 cabinet and a Meyer UPA1 cabinet. Sennheiser radio microphones and Studer CD machines were mixed through a Midas XL3, and fed to a Saori digital processor that had been recently purchased for its control and accurate reproduction qualities.

Because the flying system would be the first equipment to be hoisted, it had to be moved quickly, and the crew worked through the night to ensure other contractors could proceed without delay. Lights and seating followed before the system control, amplification and 16 SAT218 cabinets, for low frequency reproduction, could be installed.

A small hiccup occurred when a lack of coverage in the upper seating area was discovered. This was quickly traced back to the fact that the trussing had been hung two feet lower than specified and it was not possible to raise it any higher. A few death defying feats of athleticism by the installation team meant that the clusters were re-focused whilst still in the air, promptly solving the problem.

#### **Quick on the Draw**

Lighting equipment and software specialist Starlite Systems Technology will be celebrating the first birthday of its Stardraw 3D package at this year's Live! exhibition.

Officially launched at Live '94, Stardraw 3D is a software package that has been developed to enable lighting and stage set designers to design and display a lighting rig quickly and efficiently using a PC. Since its launch one year ago, Stardraw 3D has already proved highly popular and Starlite Systems has announced distributorships to a number of companies worldwide.

The success of Stardraw 3D has led Starlite to develop an entire range of Stardraw packages. These will include Stardraw 2D, which will include reporting and bill of materials, and Stardraw 4D - an innovative DMX control system featuring on-screen, real time 3D images of the lighting equipment to be used on stage. Starlite Systems has plans to launch these new systems in the first half of 1995 and will be at Live '95 on stand number 40.

#### **NAC Sound Renovation**

Celebrating its 25th anniversary, the National Arts Centre in Ottawa, Ontario, has undertaken a complete renovation of its sound reinforcement system. When the job is complete, the complex will have 43 amplifiers from Crest Audio powering 60 EAW loudspeakers, and Crest's Windows-based NexSys system providing computer control for the sound system in the Centre's Opera Hall.

Robert Allan, head sound engineer, was in charge of the renovation. Not far into the major project, it was determined that existing amplifiers at the venue would be inadequate to drive the new systems. The search for amplifiers was based upon two basic considerations, increased power and remote control, he told L+SI.

The final three phases of the project will also include Crest amplifiers ranging from the 3301 to the 8001 Professional Series amplifiers. All phases will be under NexSys control.



## TEC Award for Vienna II



The Soundcraft Vienna II console received a highly prestigious TEC award for technical achievement at the recent AES Show in San Francisco. Soundcraft consoles also dominated the theatre sound category at LIVE Sound! International magazine's 1994 awards. The Soundcraft Venue II was voted best front-of-house theatre console, while in the theatre monitor category the Soundcraft Delta was voted top amongst the magazine's readers. Mike Johnson and Alan Martin of Soundcraft are pictured above with the TEC award.

### More Awards For LSC's Axiom

After receiving an Australian Design Mark from the Standards Association of Australia, LSC's Axiom lighting control console has received a further two awards.

Of the 37 Australian Design Mark winners for 1994, LSC was one of only eight companies awarded an Australian Design Award. This award is for products judged to display 'design excellence' and includes consideration of "technical, human and commercial factors, as well as adherence to the concept of 'total design'."

In addition, the company was also honoured with a 'Powerhouse Museum Selection' award for the Axiom in recognition of their achievements in industrial design. These awards, of which only four were given this year, are drawn from the Australian Design Award winners and are selected for innovation in design, its significance in Australia's material culture, the potential for the product to communicate information and its export potential.

Gary Pritchard, LSC's managing director, accepted the awards at a ceremony in Sydney during November.

#### **Eighth ILDA Meeting**

The International Laser Display Association (ILDA) held their eighth annual meeting in Lincoln, Nebraska, in November. ILDA is an organisation of laser professionals, manufacturers and enthusiasts whose purpose is to promote professionalism, artistry, and technological advancement in the laser entertainment industry. This year's meeting marked the largest attendance to date, with attendees representing 10 countries.

Each year the organisation meets to honour its members for artistic merit and technical achievement. Members submit work in various categories for judging, with award-winning works shown on video, through slides or in the flesh at a gala awards banquet. Lobo Electronic of Aalen, Germany were among the few companies given two awards for their Laser shows, winning prizes in the advertisement/corporate theatre category, and the beam/atmospheric display category. Additional activities include the introduction of new technologies, seminars and workshops, and the discussion of standardisation and safety issues. This year's event also included its first ever trade show. The meeting culminated in the traditional 'Laseoff', where artists display their works focusing on the creative and artistic uses of laser light.

One of the features of this year's Advanced Technology Workshop was Creative Laser of Munich's demonstration of high performance holographic effects and gratings. Laser Physics of Salt Lake City, Utah, introduced a new line of compact, white light ion lasers, about half the size of comparable systems. Another highlight was the unveiling of a true volumetric, fully-rendered 3D display system, by NEOS Technologies Inc. of Melbourne, Florida. Their system showed great improvement over similar devices that debuted at the previous year's meeting. This volumetric projector demonstrated the feasibility of projecting a three-dimensional object, viewable from any angle, into a three-dimensional space.

#### New Dealership For Hawthorn

Australia's HirePoint Software has appointed Hawthorn Theatrical as their new dealer in the UK. The computer software for the management of lighting and sound hire operations is one of Australia's leading systems and is now firmly established within the UK.

Hawthorn Theatrical had been using the system for nearly a year and were suitably impressed with its performance before being appointed dealer. As part of their back-up service HirePoint offer a 14 hour fax service and minor modifications can be carried out to suit pricing schemes. Established in 1986, the system is making its mark worldwide.

#### **Meyer Euro Service**

#### Centre

Meyer Sound Incfeatured in L+SI in December - has announced the opening of a new European-based service centre. Located in the Netherlands at



Meyer's anechoic chamber at Radio Europa.

Radio Europa, (Meyer's Dutch distributor), the new centre provides full loudspeaker repair and re-alignment facilities.

All product servicing is carried out to the same standards as at Meyer's factory in California. The new centre employs identical test equipment and procedures, including Meyer Sound's proprietary measurement software. An anechoic chamber was specially shipped from Meyer in the USA, to ensure that all the facilities are exact copies of those used during manufacturing.

#### d&b in Birmingham Symphony Hall

As part of a major refurbishment programme and after extensive tests, d&b audiotechnik loudspeaker systems have been chosen as the house system for the prestigious Symphony Hall in Birmingham. At its opening in 1991, the Symphony Hall set new standards in European Concert Hall design by offering excellent acoustics courtesy of a movable acoustic canopy and mechanically controlled reverberation chambers. By these means the acoustics may be altered to match the style of music being performed. Part of the brief during the refurbishment programme was to ensure that the 'house' system would provide high quality sound for the wide variety of classical, jazz, folk, pop, rock and vocal users in any given year.

The installation comprises left and right clusters each consisting of four 402-Top and four 402-Sub cabinets and a centre cluster which consists of two 602-LS and four E3-LS all driven with P1200A mainframes fitted with relevant d&b controller modules.



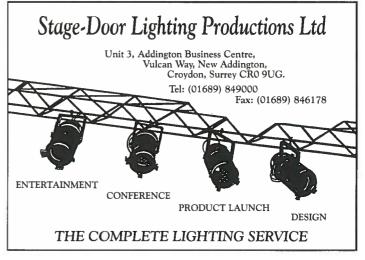
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#### Strand's LDI Winner

New from Strand Lighting, and winner of LDI 94 New Architectural Product of the Year award, is Premiere Network Manager, a Windows-based application software package which enables a computer to be connected on-line to up to eight Premiere systems for total building management of up to 256 independent rooms.

Launched at the LDI 94 show in Reno, Nevada in November, the award was collected by Strand Lighting Inc's vice president of sales, Peter Rogers. It follows success in the United Kingdom, where Premiere has been used in a number of projects which have won National Lighting Awards. These include 'The World of Beatrix Potter' exhibition in 1993 and Durham

Cathedral in 1994. The Premiere system offers flexibility for creative architectural lighting control. Its unique Configuration Software enables the system to be tailored to meet the needs of the user, and adapt easily if their requirements change.

It is particularly suitable for applications ranging from conference venues, hotels and theme parks to museums and offices where lighting levels, control station lockouts, time clock events and room partitioning benefit from centralised control.

The system can also be used as a designer's programming tool. Graphical sliders provide a visual indication and modification of channel levels. User friendly menu options and icons enable presets and fade times to be easily recalled, recorded (live or blind) and restored to defaults at any time. Comprehensive room grouping, display options and custom labels provide rapid group control of rooms. Combined with event scheduling and macro capability, the Premiere Network Manager is an extremely powerful addition to the Premiere range.

#### Rodney Groth

furious battle with cancer. Husband to Valerie (who many may know from her days at the Tricycle Theatre in London and as LD for the Kids from Fame tours of the early eighties), he and Val were a team as lighting designer and production manager for Kenny G. Rodney was a familiar face in Europe, first coming over with Dr Hook and the Medicine Show in the seventies, and will be well known to many readers of this magazine. He also leaves a young son Keiran, the apple of his father's eye.

#### **News from SM Range**



Eurohire MD Mervin George (right) with LMC's Dave Wiggins and the Soundcraft SM16.

PA hire company Eurohire has taken delivery of a Soundcraft SM16 stage monitor console, supplied by LMC Audio Systems.

Set for use with the current Joe Longthorn UK tour, the SM16 was selected to handle foldback for the large band. After taking in major venues all over the country, the 65 date tour culminates at the end of '95 in Hull. The SM16 will soon find itself out on the road again with Eurohire who have already handled tour sound for Aswad, Terrovision and Kool and the Gang this year.

A Soundcraft SM24 stage monitor console has been busy with Sensible Music. In its first two weeks on the road the desk was used to provide monitor mixes for Page and Plant on 'Later, with Jools Holland'; Alison Moyet, Holly Johnson and others at the major AIDS benefit 'Live at the Lighthouse'; and in concert with Indie stars Elastica and The Cranberries.

Soundcraft desks are also part of the inventory of Jason Sound, and are on the road for the current Crash Test Dummies world tour which features two Soundcraft consoles: a Soundcraft Europa for front-of-house with monitor mixes courtesy of a Soundcraft SM24.

lason Sound is one of Canada's largest sound companies and has handled international tours for a long list of major home-grown acts including Bachmann Turner Overdrive, Sarah McLachlan and Bryan Adams.

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#### Gemini forms GSL

#### Rodney Groth died in late November, after a short, but Gemini Sound Product of Carberet, New Jersey has announced the formation of GSL, a Paris-based office which will import and distribute Gemini and LyteQuest products in the French market. Industry veteran Patrice Vandenbusche, formerly of J Collyns, will run the new facility. He brings to GSL over 15 years' MSA experience in the industry, with an extensive knowledge and excellent relationship with THE LEADMILL - MOVING AHEAD IN 1995 Are you The Leadmill in Sheffield is seeking a lighting consultant whose brief will be to create a technical department, which, through its excellence, delights looking for and amazes its customers. The venue is well-established in the culture of its home town Sheffield and since its opening in 1980 has consistently charted in the NME and Melody Maker venue polls. It now wants to develop а неш the club aspect of the venue and is looking for a creative person to come in and adapt and improve the existing equipment to make the Leadmill audio-technica one of the leading nightclubs in the area. challenge for The successful applicant will be expected to pursue this aim and will also Technica House, Royal London Industrial Estate, be responsible for identifying staff training and equipment needs. Old Lane, Leeds LS11 8AG The post is temporary and wage is negotiable, according to experience. 1995 . . . ? Tel: 0532 771441 Fax: 0532 704836 Please send your CV and written application to: Rhona Fisher, The Leadmill, 6/7 Leadmill Road, Sheffield S1 4FF. Look no further If you would like further details contact Rhona Fisher on (0742) 754500. LIGHTING AND SOUND INTERNATIONAL IANUARY 1995

#### De-lighted in Siberia



Alan Luxford: happy at work in Siberia.

Strand Lighting recently exhibited at the Siberian Stage and Lighting 94 Exhibition in Novosibirsk and was the only western company to win the coveted Gold Diploma award.

Strand manager Alan Luxford, assisted by Strand's Moscow-based manager Natasha Karonen, was highly delighted with sales made directly at the show, including a new Strand Lighting 430 control desk, spotlights and dimmers.

Strand's catalogue has recently been published in Russian.

#### Klark Teknik at AES

Klark Teknik will be launching a new DSP-based product at the AES in Paris, on the Mark IV Audio stand. Other products on show will include the Klark Teknik DN320 and DN330 preset equalisers for permanent installations. In 1U of rack space, the DN320 and DN330 feature 24 volt DC operation, in addition to 115/230 volt AC, making them suitable for emergency evacuation systems and other areas requiring a mains power fail-safe facility.

#### Sennheiser Release

Sennheiser's SK50 switchable channel miniature pocket transmitter and EM 1046 receiver system are now available for use on VHF frequencies, approved by the DTI. The SK 50/EM 1046 VHF system represents a significant cost saving on an equivalent UHF configured system, while offering the very latest advances in radio transmission technology.

The SK50 VHF is a slimline miniature body pack transmitter, operable on up to 16 switchable channels, within a 24MHz window and providing an RF output of 50mW. Power comes from either accumulator packs or battery packs.

The EM 1046 is a programmable eight channel diversity receiver, based around a system of microprocessor controlled receiver modules. It also features state-of-the-art Mikroport technology incorporating the latest in acoustic and RF developments. All receiver channels are programmable to a large number of different frequencies within a 24mHz window, on-site.

#### Shuttlesound for JHE

Shuttlesound have reported that Electro-Voice's recently launched range of compact loudspeaker systems, System 200, has been much in use as part of JHE Audio's hire stock. JHE currently own 10 pairs of Sx200 and a pair of Sb120 subs, and have been delighted with their performance.

### Royal Variety Performance

Two Soundtracs sound reinforcement consoles, a Soundtracs Sequel II and a Solo 8 Live, were used at the 1994 BBC Royal Variety Performance at the Dominion Theatre, Tottenham Court Road in late November, where a whole host of star performers including Take That and Shirley Bassey took to the stage. The Sequel II was used in front of house position, while the Solo 8 Live provided the sub-mix for the orchestra

#### **EAW On Tour**

EAW loudspeaker systems are currently in use on many major UK and European concert tours.

Chris De Burgh's concert is on tour with an EAW system consisting of KF850s, SB850s and KF300s creating a 96 Box system. Using the same loudspeakers on their UK tours are Shirley Bassey (40 Box system), Tom Jones (40 Box system) and Michael Ball (40 Box system) whilst Harry Connick Junior (64 Box system) has them on his European tour, all supplied by Concert Sound.

Mick Anderson of Concert Sound told L+SI he is pleased with the quality of sound and the reliability of the EAW loudspeakers and finds that the rental of these systems has become increasingly popular on many major tours.

Canegreen and JHE Audio Ltd are currently touring Europe with Paul Weller and an EAW system using 32 KF850s and 16 SB850s.

Lighting Technology Projects have just supplied 24 KF850s and eight BH852s to Concert Systems to expand their existing EAW rental stock.

## A Lighting Control Console?

The ARRI Graphics Tablet lets you concentrate on what you're good at – lighting design. So, if

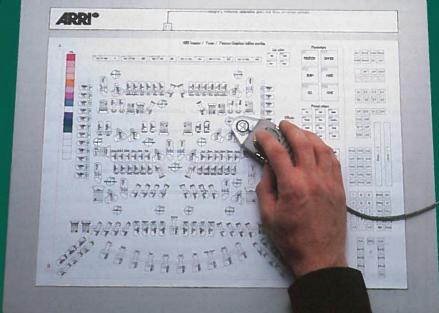
you're tired of button bashing and making mistakes, check out the Imagine console family. They're more than just buttons and faders.

Select an instrument...

Easily control position & colour...

Launch complex functions...

...just point & click!





Lighting Controls for the future...

## Why Compromise

"Every profile at the show was eclipsed once again by the range from Robert Juliat, whose products are still so gorgeously desirable, though sadly unaffordable to some in the UK"

Rob Halliday

Plasa 94 report in the October issue of LSI.

#### SX Profiles

- Double condenser optics
- . 1/1.2 and 2kw tungsten
- · 1.2 and 2.5kw HMI/MSR
- HMI versions have full DMX control of fadelignition
- · Double gobo holders
- · Rotating zoom assembly
- · Shutter locking device
- · Pretty pink writing



Robert Juliat profiles are certainly not the cheap option.

Jean-Charles Juliat wanted a complete range of tungsten and HMI profiles that offered the highest possible optical performance and features with a build quality that would ensure a long working life. These profiles would need to be easy to use and quick to maintain.

Jean-Charles is not easily pleased.

He smiles a great deal these days.

Why compromise...



Robert Juliat Tel: (33) | 42 43 35 35 Fax: (33) | 42 43 08 05 Decoupe Ltd Tel: (44) | 18 | 505 8522 Fax: (44) | 18 | 504 4755

#### People in the News

Crest Audio Inc. has announced the appointment of **Andy Simmons** to the position of professional markets manager. He will initially concentrate on assisting Crest UK distributor, Audio Projects, with sales of Crest amplifiers and Crest Consoles within the tour sound market. He is located at the Crest Europe office in Hove, England. Prior to joining Crest, Andy spent three years in the States working for Edward Simon & Company, a general systems contracting firm.

Artec Consultants Inc, a full-service consulting group located in New York City engaged in theatre planning, theatre equipment consulting and acoustics for the performing arts, has announced the appointment of **Robert Essert** as deputy chairman. Robert, who joined Artec in 1980, is an Artec associate and principal consultant with the firm. Until recently he served as director of Artec's acoustics consulting services.

Rosco have announced two new appointments. Kees Frijters, well known to many people in the industry as head of his family's company Ultrex, has joined the staff of Rosco London as European development manager. Kees will be based in the new European Rosco office situated near Amsterdam, the address of which is: Claus Sluteweg 125/4A, 2012 WS Haarlem, telephone 023 288257. In Rosco's London office Anna Western (probably better known as Anna Sassi), who has been a member of the Rosco sales team for two years, has been promoted to sales manager.

Vari-Lite Inc in Dallas, Texas, has expanded, and and as a result, undertaken some re-organisation. Promotions from within Vari-Lite

include **David Alley** as executive vice-president of international operations, **Loren Haas** as executive vice-president of North American operations, **Susan Tesh** as general manager of Vari-Lite Los Angeles, and **Angela Hilton** as assistant sales manager for the Dallas operations. The company has also announced the addition of **Lee Magadini** (mentioned in our LDI Report last month), formally the director of sales and marketing for Vanco Lighting Services, to its New York sales staff.

Imagination has made a number of board appointments and changes which will come into effect in the New Year. Jack Raby, from project management, has been appointed to the board to focus on the delivery of projects in America and to build further links with Imagination's sister company, Imagination Entertainments. Guy Stevenson assumes a new role as special projects director with board responsibility for logistics. To acknowledge the growing importance of new media, Doug Larner assumes a board position with responsibility for business TV, with Simon King taking board responsibility for visual communications and Multi-Media. Dilys Maltby has relinquished the role of development director to join Richard Zucker and Paul Mackay as client services director. David Girling also joins the board as client services director with particular responsibility for the Ford account. Dilys' former role is taken over by Ralph Ardill who joins the board as marketing director with responsibility for marketing, business development and communications. Adrian Caddy assumes a new role as deputy creative director working closely with Gary Withers, creative and managing director.

Chris Collings, who has been sales manager at

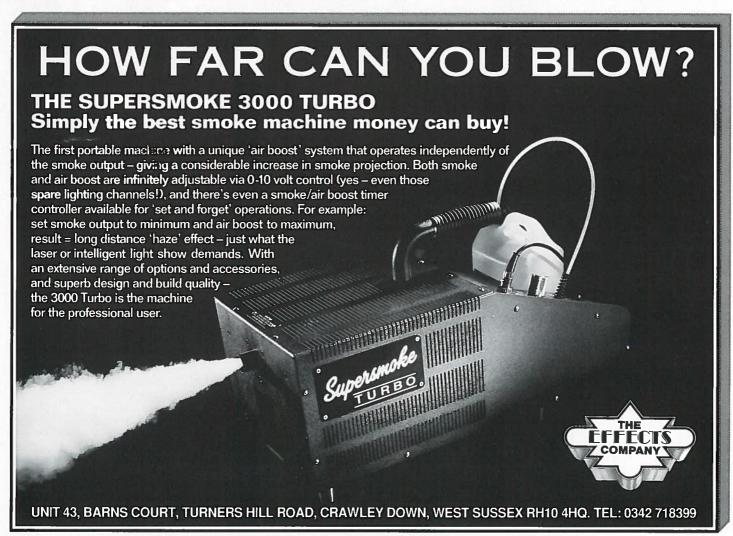
R&W for the last eight years has announced his departure to form his own company, Aspen Media Ltd, where he will be specialising in digital audio processing, machine control and synchronisation tools. The company is likely to be based in Hemel Hempstead, but details are unavailable as yet. In the interim Chris can be contacted on (01525) 383239.

Gary Ash, late of Connectronics Ltd, has been appointed to manage R&W's new distribution acquisition, TC Electronic, and Phil Darke, from Sound Technology, who also has his own recording studio, has joined the sales department in a technical sales role. Both bring many years' experience in the professional audio industry to the company.

ARX Systems has announced the appointment of **Bruce Maddocks** to the newly-created position of engineering director for the USA. Well known in both New York and Los Angeles audio circles, Bruce joins ARX after eight years at the Record Plant in LA and three years at the Hit Factory in New York.

The new year brings with it a new face to the sales department at AC Lighting. Following a successful two years with Compulite UK, **Mike Faulkner** joins AC to manage the more technical enquiries and help customers with their choice of modern complicated control systems. He will be playing a key part in the promotion of the new Jands-Hog and Wholehog II lighting control systems being distributed by AC Lighting.

FAX YOUR PEOPLE NEWS TO L+SI ON (01323) 646905



#### **OLIVER! COMES BACK FOR MORE**

Rob Halliday Live at the Palladium

By the time you read this, the show will no longer be 'Cameron Mackintosh's new £3.5m production of *Oliver!*, the show won't be featured in every single Sunday supplement, and the London Palladium will no longer be awash with sub-contractors - though hopefully the ticket-touts and autograph seekers will still be hanging around outside. Oliver! will have settled comfortably into the West End, delighting eight audiences a week with its excellent performances and good tunes.

For me, the memories of the production period, the previews, the star-studded first night and, of course, the first night party are still fresh if slightly hazy in the case of the party! Oliver! may be a classic musical, known and loved by a large percentage of the British population, famous for the revolutionary scenic design of its original, 1960 production and immortalised on film. But, as the hype made clear, this was a new production, produced on the largest scale in the style established by a decade of new musicals from the Andrew Lloyd Webber and Cameron Mackintosh stables. The run up to that first night took three months of work in the theatre, and many more in offices and design studios before that. It was a great party on that first night, but all those involved with the show earnt it!

If you think this makes it sound like I had more involvement with the show than usual, you'd be right. A phone-call in early August led to a meeting with the show's production manager, Kevin Eld, and I was booked as the show's moving light programmer. I thought about keeping a diary, but didn't. Why? A comment made by a film director in a recent interview sums it up best: "While working on a film, you don't go home and go to bed," he said, "you escape back to your house and collapse". The same applies in theatre. The diary never got written. So, instead, I offer a series of snapshots of the making of a musical . . .

#### The Show

Oliver! is a legend in musical theatre circles. When it first opened in 1960 it caught a world still dominated by American musicals completely by surprise. The show tried out in Wimbledon before moving into the West End; changes were made and songs added throughout that 10-day run. The show then moved into the New Theatre (now the Albery), where it opened.

Lionel Bart recalls predicting disaster early on in the first night when a piece of scenery didn't move properly, and he left for the duration of the show. He returned to curtain call after curtain call and an audience who refused to leave.

That reaction might not be too much of a surprise given the reputation the show now has, but on that night it was a miracle. Not only was the show new, but the way it was presented was a radical change from the tradition of the American musicals of the time. Designer Sean Kenny came from an architectural background; with Oliver! he moved right away from the 'painterly' scenery of the time and refused to hide the mechanics of the show. His set used a central revolve backed with sliding trucks to allow the show to move quickly between the many locations the plot demanded. To help speed things up, scenery was changed in view of the audience, the masking above the stage area was swept away and John Wyckham's lighting design became one of the first 'exposed rigs' in stage lighting history. It is fair to say that this revolutionary stage design ushered in a whole new era of theatrical design, and all of the current musical 'epics' owe their scenic existence to Kenny's work; indeed, Cats is performed at the Kenny-designed New London Theatre and was its first hit. Designer John Napier



Jonathan Pryce as Fagin with his gang.

recalls feeling as if he was being guided by Kenny's spirit when designing the show.

The show became an overnight smash hit. It ran in London until 1966, transferred to Broadway in 1963 and, after the London run ended, became a smash hit film, winning six Oscars.

Having achieved all of that, the show then influenced the future of the British musical in another way, by offering a young Cameron Mackintosh his first theatre job. By 1976 he had moved on to producing shows and launched his own revival of the show, bringing it back into its original home, the Albery, where it ran for a further two-and-a-half years. A further revival, in 1983, was equally successful in London, though wasn't so well received when it moved to New York. Mackintosh then had a busy decade producing Cats, Phantom of the Opera, Les Miserables, and Miss Saigon. Oliver! moved onto the back burner.

#### The New Production

Cameron Mackintosh's position in any 'richest people in Britain' list, and the number of shows he has running around the world, are a clear indication that his theatrical instincts are right more often than they are wrong. His instinct told him that, innovative as *Oliver!*'s original design was, it was now hampering the show, preventing anyone from taking a fresh look at it. This, added to the fact that the original set no longer existed despite spending many years in storage, meant that a new production should, and could, start from scratch.

And so the 'youth opportunity scheme' production (as actor Jonathan Pryce christened it) was given life - so nicknamed because few of the production team were born when the show was first created. Director Sam Mendes has made his reputation directing plays and acclaimed musicals (including Cabaret, covered in L+SI, January, 1994) at the tiny Donmar Warehouse theatre in London, and larger scale productions at the National and the RSC. Choreographer Matthew Bourne is the driving force behind acclaimed dance company Adventures in Motion Pictures, and choreographed the less-than-successful musical Children of Eden. Designer Anthony Ward has produced a huge range of work, usually in the subsidised sector, for companies such as the Manchester Royal Exchange Theatre, Opera North and the Bristol Old Vic. Sound designers Mike Walker and Paul Groothuis have

Production photos: Michael le Poer Trench

wide-ranging backgrounds, Walker having worked as production sound engineer for many West End and touring productions and Groothuis having designed the sound for many shows at the National Theatre; they first teamed up on the National Theatre's *Carousel*.

To complete the team, Mackintosh added the steady, experienced hand of lighting designer David Hersey and orchestrator Bill Brohn - both of whom were around at the time of the original production.

#### Design

In his programme notes about the show, Cameron Mackintosh explains that the production team decided to take a 'laterally moving' approach to the new production because of the use of the revolve in the original, and the use of a revolve in Les Miserables. From that basic decision, and the decision to go for realistic scenery, designer Anthony Ward then had to tackle a whole host of other problems. The first of these was the sheer number of locations the show requires - it moves quickly from an open heath in a storm for the prologue sequence, to the workhouse full of children, to an undertaker's shop, to a whole range of locations in and around London, down into Fagin's underground lair, and then, in the end sequence, onto the city's rooftops. All this in just two hours, and the London Palladium, with by no means the largest stage in the world, has limited wing space and, because of its variety-house origins, poor sightlines to the upstage areas from many of its seats.

This led to Ward deciding to keep as much of the action as possible downstage. He claimed the upstage third of the stage exclusively for scenery; this space is filled with a wide variety of realistic, sliding vistas, giving a clear visual location to the show's many scenes. The downstage two-thirds of the stage are covered with a gently raked floor detailed to look like a Dickensian road (though a closer inspection of the manhole covers in that floor reveal some less-than-accurate detailing - the names in the covers are those of members of the production team!). In each corner of this stage is a three-storey high tower, capable of tracking on or off stage to allow the central performance area to be opened up or closed in. Between the downstage towers is a platform which, when the towers are on-stage, can be lifted to the top of them (the operation of which is made very clear by the



To maximise the space available at the Palladium, moving lights were included in the rig, notably VL5s and VL6s, together with DHA's pitching Digital Light Curtains.

them (the operation of which is made very clear by the description of the towers acting like fork-lift trucks), and below that is a fill lift which can rise to fill the gap left by the main lift. Both the loft and fill lift contain tracks to allow trucks to run across them, and tracks also cross further upstage for other scenic elements

Above all of this is a grid packed with flown scenery - a giant wall with three windows that doubles as the wall of the workhouse and, by opening up the brick arches in its lower half, as the entrance to the Three Cripples pub; a window frame for the inside of the Brownlow house in Bloomsbury; coffins for the Sowerberry funeral parlour; the railings to London Bridge, and another bridge that, by a

quick change of handrails in the interval, doubles as two of London's other bridges. Upstage is a huge, cloud-covered cyclorama, and the little space that remains is filled with masking - in another departure from the original, David Hersey's lighting rig is, as far as possible, hidden from view.

Upstage, in the 'scenic' third of the stage, the giant, curved Bloomsbury Crescent flat is flown. Below it are lines of 'railway tracks' across which run a variety of vistas of London, as well as a boat (seen sailing past the Three Cripples bar) and St. Paul's Cathedral, which appears to mark Oliver's real arrival in London. Just downstage of these tracks are flown tracks carrying tall brick sliders, which track across stage to mask off the upstage area at various times.

This is all a very tight fit - in places the clearance between scenic elements and lighting bars is measured in fractions of a centimetre. The wings are even more chaotic, with some scenic elements winched up into the air as they come off stage to allow tracks and truck bases to be re-used for other scenery. Even the short corridor to the dock door is used to store scenery.

Just to round off the complications, the floor contains a series of tunnels to allow the children to pop up through the manholes, and two pop-up chimneys used in the rooftop scene.

The work required to convert this to a working reality was led by production manager Kevin Eld and design co-ordinator Will Bowen, who also decided to make the finished product self-contained, so that the chimneys, tunnels and the like fitted within the show deck with no need to break through the Palladium's own floor. This was done to avoid having to damage the theatre's famous revolve, and to make it possible to tour the show by simply lifting the scenery out of the venue



Moving light control - Arri Imagine 3, Apple Macintosh for the DLCs, Powerbook for keeping track of everything - in the stalls during the production period.

and re-installing it in another suitably sized

To present the movements the set had to accomplish to the people who would have to make it work, Eld and Bowen used the services of Modelbox to generate both conventional plans and animations of the set in action. From these presentations a whole host of contractors became involved in the show - Terry Murphy Scenery, Victor Mara, Kimpton Walker, Michael Whitely Associates and Ken Creasy Ltd building scenery with Delstar Engineering, Stage Services, Smith & Forbes Engineering, Met Scene Fabrication, and Techfab carrying out the engineering work, along with Mike Barnett who designed the tricksy items such as the large St. Paul's Cathedral (which looks like an easy thing to design at first glance, but less so when you realise that it is very heavy, up to 20 feet high, and is running on a very skinny base!).

Because of the complicated nature of the set's movements, the decision was taken to automate most of it and run it from a computerised control system. For this, Eld turned to Stage Technologies and their Acrobat! control desk, now nearing its final form after developing across shows such as Sunset Boulevard, Phantom of the Opera in Manchester and Copacabana. Intended to be a general purpose control desk rather than one specific to a particular show, Acrobat! uses a PC running special software under Windows to store cue information which is then passed to a specialist computer in the desk. This handles running cues, passing information to the control racks in the theatre's basement over an industrial network with guaranteed response times. As Stage Technologies' Mark Ager explained: "It's important because, unlike lighting where if something doesn't respond immediately everyone moans a bit but it doesn't really matter, we have some enormous pieces of scenery moving near people - in this case children. You have to know exactly what they're going to do." To aid safe working, the desk is now installed on a fly floor, giving the operator a view of the stage backed up by monitors providing a series of other views.

Stage Technologies became involved in the show once the set design, and thoughts about how the set was to be used, were complete. Their work was then split over two areas - to control all of the motion on the show, and to supply 14 of their Big Tow winches to provide some of that movement. But the desk also had to talk to motors supplied by Unusual Rigging, and friction drives and hydraulic systems supplied by Delstar, and also to handle all of the interlocking and safety systems required to make the set as safe as possible.

The final system controls 32 'axes', or movable items, in a system Ager thinks is "one of the biggest" they've worked on, despite not containing anything as huge as the 7.5 tonne house they had to control on Sunset Boulevard. The complications arise because "there are so many axes on this show. When you're controlling just one item, it doesn't really matter, in terms of control, whether it's a door or a huge house - the difference is your nerves; with a huge house the stress level goes up! But here we're controlling lots of different types of motors, which is complicated."

The Stage Technologies team of Ager, John Hastie, Ted Moore and operators Mike Sharp and James McKee worked in the theatre from the beginning of September, starting by installing the cabling, then the control racks, then commissioning the individual pieces of scenery. Their equipment follows the set in being designed to move out of the Palladium and into another theatre easily - "everything is connected by plugs and sockets, so it would be easy to move elsewhere," Ager notes.

For the most part, all of the scenery was working by the time the cast arrived in the theatre, and Ager is proud of the fact that the control system has met all of the demands placed on it. "The London vistas in 'Consider Yourself' were originally intended to do absolutely everything. They now do very little, but we had them doing what Sam Mendes wanted and he then changed his mind. Nothing got cut because it couldn't be done - I'm still waiting for a show that really pushes the control to the limit."

#### Lighting

In the midst of the near-chaos that the Oliver! technical period became, there were an assortment of enjoyable, 'happy' moments. One of these was when lighting designer David Hersey started experimenting with lighting on stage and, faced with the Sowerberry funeral parlour with its upstage window and a door set diagonally across the stage, tried using the two bars of pitching Digital Light Curtains. The DLC is a product made by his company, DHA, and the ultimate version of a lighting tool he's been working on for many years, but one which, in its pitching guise, he'd never actually used on a show. One DLC came straight in through the window, perfectly. Another pitched and panned to line up with the diagonal door, giving a highly realistic 'haze' of light through the door, rather than the more usual circular light beam. Immediately new lighting possibilities for other scenes started opening up in his mind.

The incident sums up Hersey's flexible and constantly creative approach to lighting design. While looking at the set design, he develops a number of general concepts for the show. On Oliver!, for example, the large windows at the back of the workhouse seemed to demand strong backlighting, but from different directions in different scenes to denote the passing of time. The opening storm sequence called for lightning, the search for which led to the Swiss-made Broncolor strobe, an adapted Cantata with a serious amount of punch even when used with forked-lightning gobos. In an ideal world, the 'textbook' approach would then have been to watch rehearsals,

generate more ideas, note down blocking and design a rig incorporating the lights needed to light each moment as visualised in the LD's head. However, on shows like Oliver!, that approach is impossible; the rig was in the air before the cast even started rehearsing, and the organisation required for a rig of this size meant that the original lighting design for the show was generated in the middle of the summer.

As with all shows of this type, space was tight, so to maximise the use of space, moving lights were included in the rig. At around this time Vari-Lite's new VL6 appeared and was selected because it left more room for other lights, and they were quiet - quiet enough even to impress the sound team, who had come to expect moving lights to present them with all sorts of noise problems. With VL6s chosen, VL5s were also added to the rig to provide wash

lighting. The pitching Digital Light Curtains were thrown in because of their potential for generating realistic highlights and shadows across Anthony Ward's set, while being able to move those highlights to reflect the changes of location it was hoped the moving scenery would suggest.

The rest of the rig was fairly conventional, and made up largely of Strand gear - Alto 8/16k profiles front of house, a variety of Cantata profiles on the downstage lighting bars and circle fronts, Cantata PCs and Cadenza fresnels providing toplight and backlight, with Parcans topped with Rainbow scrollers, providing the backlight and sidelight washes, and four 5k fresnels and a 4k HMI fresnel giving strong directional backlights. CCT provided the solution to one particular problem with their acclaimed 28-58 degree Silhouette lens tube these were topped with scrollers and deployed as cyc lighting. In all, the rig is spread across 11 on-stage electrics bars, side lighting coming from positions installed around the set, and front-of-house lighting from both circle fronts, side circle positions, an advance bar and two 'Juliet' booms installed for the show. These, again, show how 'accepted' stage lighting now is compared to the original production, since 'advance' lighting positions were only really introduced by Richard Pilbrow in the original production of Bart's second major musical, Blitz!, some years after Oliver! first appeared.

The rig was supplied by White Light, who also supplied eight of their new DMX-controlled VSFX cloud effects units. Given the scale of the show, Hersey decided it was time to move away from the standard cloud disks: "The painted cyc was so wonderful that we decided to do something a little different, so we had some new cloud disks made with artwork based on the cyc artwork."

This initial rig was installed by production electrician Bill Wardroper and his team early in the fit-up period; the lamps were then wrapped in bin bags for the rest of the fit-up period in a desperate attempt to keep them clean!

They were revealed again early in October, allowing the rig to be flashed out prior to the start of focusing, which took place over three days. But here, again, the techniques of focusing for a show of this scale differ from the textbook approach, since although Hersey and assistant Jenny Kagan had seen an early run-through of the show, the cast were still a week away from a final, rehearsal-room run-through and things would certainly change over the four-week technical rehearsal period in the theatre. The focus thus consisted of setting general cover lights, roughing in specials, and experimenting with potentially useful ideas, while actually leaving many lanterns unfocused 'for future expansion'.

Serious lighting work started on a Sunday session set aside specifically for that purpose, and spent largely working out the tricky storm sequence that forms the show's prologue and then the opening cues of 'Food', the first number. There was one further lighting-only Sunday, but apart



Yamaha digital EQs racked beneath the FOH consoles.

from that and some morning sessions during the preview period, all lighting took place over other rehearsals. It often surprises outside observers that, even with many-month long fit up and rehearsal periods there still isn't really time to do everything. One of the advantages of moving lights is that, once a lighting idea is created, they can be moved to position very quickly without having to hold up a rehearsal while someone gets up to a light (and without the difficulty of having to navigate a tallescope through the set). In a number of cases the Vari\*Lites didn't provide the ideal solution, with the VL6 beam's being a touch too narrow, but they could demonstrate an idea to the creative team, and that idea could then be improved upon by adding conventional lamps when time was available.

In this respect, David Hersey takes a very 'actorly' approach to lighting - just as a good actor won't be afraid to experiment with their performance during rehearsals, changing or discarding elements of it as time passes, so David never treats his lighting rig as a sacrosanct, unchangeable object. If a scene could be better lit by some lights he doesn't have, he will add them. If a particular light or colour doesn't seem to be working for a scene, he will change if for one that does - one change which caused some amusement being the replacement of an 8-Lite with two birdies! And the change which amused Hersey most was his discovery that the colour which worked best on Jonathan Pryce's Fagin was 136, which "I haven't used in years!" This all places extra work on the production electricians who have to move the lamps and find the circuits to feed them, and on Jenny Kagan who has to keep track of what every light in the show is doing so that a light that does good work in four scenes isn't replaced because it happens not to work in one other scene (as well as plotting the followspots into the show). However, the reasoning behind the changes are always completely clear, so there are rarely any objections.

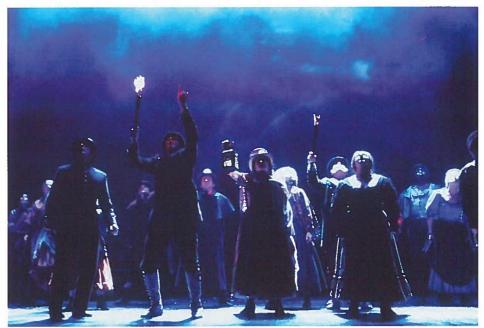
Hersey is helped in this 'fluid rig' approach to lighting by technology, in the form of Macintosh computers running PowerDraw (for drawing plans) and FileMaker (for rig and cue databases). His purchase of an A3 laser printer also meant that high quality printed plans could be generated for the crew on a daily basis. All of the lighting computers - two on the production desk, three Powerbooks and the printer were networked, a project that started off being just for amusement, but

ended up a great timesaver as cue information could be passed from machine to machine quickly and easily.

It is a measure of how long the production period for *Oliver!* was that, when we started on the show, we were about the first people in the country to have the new Vari-Lite VL6, yet by the time the show opened I'd already read seemingly countless articles in L+SI about their appearances on other shows. Over that time, we saw them develop from compact, attractive, promising, but somewhat wayward children into useful, reliable workhorses.

The selection of the moving light system for the show was influenced by a number of factors. Space was one, and noise was another; the VL5 and VL6 scored highly on both of these counts. The system also had to fit into a tightly defined budget, and the two Vari\*Lites fitted this bill as well. What wouldn't have fitted so well would have been an Artisan and operator for the run of the show; ideally, the producers wanted the show run from one controller by one operator. But plotting the show on one desk would have been impractical, so instead it was decided to use the house Galaxy 3 for the conventional rig, a Mac to control the DLCs, and another controller to run the moving lights. These would then be linked so that they could all be triggered from one control position.

Which left the choice of the second controller. In the end the decision was largely between Compulite's Animator and Arri's Imagine 3. The Animator has enjoyed success on a variety of moving light shows. The Imagine 3 was billed as



A Jem 1000 mini low-smoke machine, two Skywalkers and the DF50 haze in the air, combined with the effects of the moving lights, recreate a Dickensian London.



James Villiers, Sally Dexter and Carmel McSharry on stage.

first launched, but had never really been used for controlling large moving light rigs. After trials with both, and discussions in and around the PLASA show, we went for the Imagine 3 - though had Strand's LDS430 been finished, with all of the features promised, it might have made an interesting alternative.

Why the Imagine? Mainly because of its graphics tablet. This device has been around for a while, and allows lamps to be selected simply by touching the appropriate symbol on the lighting plan. It's always seemed more trouble than it's worth for conventional rigs, but really comes into its own on large, multi-parameter rigs. The Imagine's twin control wheels work particularly well with the tablet - focusing a lamp is a matter of selecting the unit with the pen, then positioning it using the two wheels. It quickly becomes very intuitive and quick to operate which was important, given that the desk would eventually be handed over to the house crew to run the moving lights on.

DMX from the Imagine was run down a newly installed control multicore to the stage left fly floor and into a complex, split DMX network devised by White Light's Dave Isherwood and implemented using XTBA's smart splitters. This distributed isolated data to five Vari-Lite smart repeaters feeding eight VL5s and 12 VL6s, to the 60-odd Rainbow scrollers also controlled by the Imagine, to the VSFX cloud disks and other assorted effects, and to the extra dimmers installed to feed the VL5s. Despite the system's complexity, it worked first time and has continued to work reliably ever since.

The original moving light layout had two VL5s low on each pros boom and four along the advance bar, then 12 VL6s arranged with five on LX bar one, four on bar 3 and three on bar 6, following the diminishing perspective of the set. The Varis on the upstage bar were rigged on a

tracking bar devised by Stage Technologies; this let all three units be repositioned across the stage to allow the workhouse window lighting to arrive from different directions or, potentially, to change direction through the course of a scene.

Though the VL6 positions remained constant, some juggling of the VL5s took place in early lighting sessions, with two of the VL5s from the advance bar being dropped down to the top of the booms (from where they can usefully follow the lift as it rises and falls), and four VL5s being added to LX bar one as Hersey found that position increasingly useful. During the same sessions the usual problems with the

VL5s colour system occurred, since they still refused to generate the pale, cool blues that the rest of the show's lighting was based on. They now have 202 over their lenses to solve that problem.

Apart from that, the 5s worked well and reliably, their light quality fitting in well with Hersey's demand for "clean, clear areas of light" and working well with the beamlight followspots though the extra brightness promised by the forthcoming 1200W version would have been useful on occasion.

The VL6s were more troublesome: 12 were installed and settled in quite nicely. Then Vari-Lite made a series of design modifications and came in and swapped out our 12 for 12 new, modified units, but we continued to experience problems. A second Vari-Lite visit late in the preview period, to fit a new colour wheel (silvered to prevent it melting from the heat of the lamp) and install a software upgrade (as well as to remove six weeks of accumulated filfth), was the point when the VL6s grew up.

The new software was a revelation. The dimming action was smoothed out. And the units would immediately find the correct colour or gobo, suddenly making some effects that we'd shied away from possible. Since the show opened we've had one, minor problem when one unit lost its dimmer calibration, but haven't had to swap any out. Niggling problems remain, particularly with the unit's lamp alignment system which isn't completely reliable, but this will no doubt be sorted out with time. It's just a shame that the movement can't be smoother when controlled by DMX. They are great to look at, though - to my mind the nearest moving light equivalent to the classic Pattern 23 - and eye-catching. The crew may have made scathing remarks about the number of times they had to fly the Vari\*Lite bars in, but they always stopped to examine the VL6s when they were in!



The Arri Graphics Tablet set up for Oliver.

On this show, though, smooth movement remained the province of the pitching Digital Light Curtains, of which we had five 8-lamp units downstage and five 6-lamp units upstage, the DLCs thus also following the set's perspective. Control was, as always, from an Apple Macintosh. The pitching DLC's ability to place such light anywhere on stage, allowing true directional shafts of light, makes for a wonderful lighting tool.

It's a versatile one too - in Oliver! they are used as strong sidelights through doors and windows, as 'specials' for individual actors, as pools of light motivated by practical oil lamps and the like, and in the big ensemble number of act one, 'Consider Yourself', as directional daylight. This scene charts Oliver's progress through the streets of London with the Artful Dodger, and puts the set through a series of movements to indicate changing location and direction. This is lit by the two lines of DLCs pitched to give a strong, angled backlight into the acting area and across the set's towers. In the last, big transition, as St. Pauls Cathedral appears in the background, the DLCs pitch across the stage, their light visible thanks to the DF50 haze in the air, to give a change of light direction to reflect the change of location. The pitching capability does add a new danger, though - immediately after this live move, the DLCs at the end of bar one have to pitch flat so that they don't get hit by the scenic trucks as they move on stage.

The entire rig - moving and fixed lights - are now controlled by one operator. An extra panel with a remote go button has been added to the theatre's Galaxy. Running the show is now a two-fingered affair for the operator; the remote go triggers the Arri and, when required, this triggers the DLC Macintosh. The extra panel on the Galaxy also has forward, back and hold buttons to allow the operator to move through the show without having to reach over to the Arri. And, apart from the Palladium control room now looking like the Starship Enterprise's mission control, with buttons and monitors everywhere, the system works. The slight extra complication is probably more than made up for by the time saved while plotting the show, and the familiar, theatre-based logic of the Arri means that it is fairly easy to learn for the house crew with their Galaxy background.

#### Sound

The sound design for this production was always going to be a challenge. The show features 25 children, with ages ranging from 15 down to seven. It has a large orchestra, in an old-fashioned open pit. And while the London Palladium's stage isn't the biggest, the 2,500-seater auditorium is more demanding. And then there are sound effects to consider, these ranging from a dramatic series of storms to a cry of kittens.

The challenge was taken up by designers Paul Groothuis and Mike Walker, continuing the collaboration that began when Walker was called in to oversee the system for the National's production of Carousel while Groothuis designed the effects and operated the show. As Walker explains, that is largely the way they have continued to work: "On this show, I concentrated on the system design while Paul produced the effects."

As might be expected for a show of this scale, the system is large. At its heart sits a 92-channel Cadac J-type mixer, with computer-controlled routing and VCA assignment. While the J-type is now a fairly standard feature of musicals, this desk is one of the largest of its kind, and is the first to feature Cadac's 'flying fader' system. The eight channels used to bring effects into the desk are fully automated, allowing effects to run themselves and so leaving operator Richard Brooker free to concentrate on mixing the 'live' sound of the show. He is also helped by the computerised VCA routing and other MIDI fired events changing reverb and delay settings; while running the show Brooker generally only has to use a 'go' button and the VCA faders. The computer routes whichever characters or group of characters are important in that cue to the VCAs, which have LED displays above them to show, but the computer's assistance means that he doesn't spend all evening reaching around the desk manually re-routing channels.

Walker is now generally pleased with the desk, despite some teething problems encountered along the way. "We went for Cadac because they really are the only company producing desks that specifically meet the requirements of live theatre. In particular they are very quiet, and offer a wide range of routing options. On this show sound can be routed to over 25 separate locations - different parts of the vocal and band systems, the surround, the delays, the Meyers used upstage for effects, the various spot effect speakers and so on. The desk allows us to control all of that routing very easily. We did have some problems, especially with the automated faders which didn't perform quite as we expected, but Cadac have wo.ked through several software revisions while we've been in production and things are now getting sorted out."

This sound is collected by 34 Sennheiser SK50 radio microphone transmitters and passed on to the company's EM1046 programmable radio receivers, probably the largest system in the UK. Even with that number, Walker notes, transmitters are shared. "Those 34 packs get swapped around between 54 people; each of the 25 children wear a pack, though not all at the same time."

The new radio receivers have built-in LED displays, allowing them to be named easily and the names to be changed as the packs are swapped around characters. The system also has a monitor output showing the status of each radio, with duplicate screens at the desk and in the stage right wing. Sound assistants Julie Cole and Heather Tomlinson still have to work hard to get every pack to the right person, though - and deal with emergencies such as children trying to chew their microphones!

From the desk, separate vocal and band signals are sent to Yamaha amplifiers (a mixture of PC40002Ms and H5000s) and fed out over two different systems, both based on the boxless Tannoy drivers first introduced to the musical world by sound designer Martin Levan. Walker selected these speakers because he finds that they suit his approach to sound - an approach based on the theory that it is not possible to improve on the original acoustic sound quality. "What we are trying to do is just 'boost' the natural sounds that are occurring on stage without making them sound like they're coming from a loudspeaker. The open Tannoy drivers help with this because they have a more diffuse sound dispersion than many other loudspeakers, though the frequency

The Soft-Cue computerised prompt desk system supplied by Howard Eaton Lighting.

response is affected by using them out of their boxes. But we carried out some tests before the show fitted-up, and found that what we lost in frequency response was more than compensated for by the increased 'openness' of the sound. And, in any case, we could always use equalisers to correct the frequency response."

The vocal system thus consists of Tannoy 3836 dual concentric drivers, two located on each pros boom and a further two flown on the sound advance bar. The band system, of Tannoy CPA 10S drivers, sit next to the dual concentrics; these open drivers are backed up by Tannoy CPA 12.3B base units (in boxes!) hidden within the pros boom structure. "The main problem here was the width of the pros arch," Walker notes, "which made achieving a central image quite hard." To help with this a series of JBL Control 1 speakers are hidden along the front edge of the stage to 'fill in' the sound to the front of the stalls.

Further back, the centre area receives coverage from the flown Tannoys, and beyond that, under the overhangs of the circles, delay speakers - EAW JF50 tweeters and Control 1s under the first circle, Control 1s under the second - maintain the coverage. "The theory is that everyone should be receiving coverage from a big speaker and a little speaker. We delay these carefully so that the sound seems to come from the stage area and, because you can see the performer and the sound is diffuse rather than obviously coming from loudspeakers, the illusion seems to work," Walker noted, though he does add that "people don't realise how much seeing the performer helps. Much of this show is performed in the downstage third of the stage, which helps visibility and so audibility.

To help maintain the 'boosted sound' illusion, the show is mic'd throughout. "Every sound that happens on stage should pass through the system," Walker explains, "otherwise you hear a different 'quality' of sound and the illusion is lost - the style of musical where suddenly it's a song and all the levels go up." To enhance the show's overall sound 'atmosphere', a series of Canon V100 speakers were installed at the rear of the stalls, circle and upper circle to act as a surround sound system, though both Groothuis and Walker are wary of that term. "It never gets used as obvious 'surround'; we feed the lighter sections of the orchestra through it at a low level, and it just helps to enhance the acoustic of the theatre - if we turned it off mid-show people would notice something was up, but if we never turned it on they wouldn't feel that anything was missing," Walker explains, before adding that "it also gets used a lot in the storm sequences . .

These, and the show's other sound effects,



The author in the control room, with the controllers arranged for one-person operation.



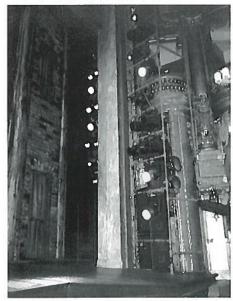
A Canon V100 used around the rear of the auditorium in the surround sound system.

really are excellent pieces of work. The most telling tribute to Groothuis work is that, after starting off with just a storm-packed prologue, director Sam Mendes increasingly used the thunder as a leitmotif for the whole show. The overall effect was helped by another increasingly common piece of technology - a MIDI link from the sound computer to the Arri Imagine, ensuring that the strobe lightning sequences always timed perfectly with the sound effects.

Groothuis created the effects on a pair of Akai S3200 samplers, which also replayed the effects through the preview period. After this they were transferred to CDs replayed from Denon CD-cart machines, for reliability and ease of operation over the show's perceived long run - though, much to Groothuis' frustration, Mendes requested a change just as the CD-recorder finished its job on the disks!

The sound rig was supplied by Autograph with the samplers coming from MM Productions, and the installation was accomplished by sound engineers Paul Spedding and Tim Lynn, who, in addition to the teething problems of a sometimes temperamental new desk, also had to sort out the large communications and video system for the show (the combination of large radio-mic rig, Motorola radio communications system and radio-controlled dimmers meant that the number of radio frequencies in use in the building reached a worrying level!) as well as, on one occasion, dealing with an Autograph van catching fire mid-delivery! The team also included assistant sound designers Janice Gurr and Brian Beasley, though as well as her sound duties, Janice was kept busy assisting the lighting design team complete various computer card games!

In terms of time available to carry out their work, those people involved with sound had possibly the most bizarre schedule of any department working on the show. Like everyone else, Spedding and his team were on site from the first day of the fit-up installing the system and its cabling and working to make the rig as visually unobtrusive as possible - all of the mains cabling to the desk was permanently installed in sub-floor trunking, and the Canon surround-sound speakers were covered with grilles painted to match the theatre's decor; they now bear an uncanny resemblance to air conditioning vents! There then followed a couple of weeks of careful checking and line up of the delays. Just before the cast arrived in the theatre the radio mic racks were installed and tested. This was followed by two weeks of rehearsals with the cast accompanied by just a piano: Walker and Groothuis didn't hear the full version of the show with orchestra until just a few days before the first preview, which is



VL5s, boxless Tannoy drivers and Tannoy bass units on the proscenium boom.



The heart of the sound system - a 92-channel Cadac J-type desk, one of the largest of its kind, and the first to feature the 'flying fader' system.

standard practice in musicals because of the high cost of the orchestra. Surprisingly, this didn't cause too many problems. "The rehearsal period was useful for us because we could sort out the radios, work out the blocking of the cast, programme the computer and get the vocals balanced," Walker recalls. The orchestral balance was then roughed in during a day's band call specifically for sound, and the overall balance finalised over the final technical rehearsals and the long preview period.

#### The Final Countdown

In mid-October, when I reported for work on Oliver!, the production was in a curious phase; both the show and the theatre itself were as if half complete. The set stood proudly on the stage, almost all there and looking complete (though constant overnight work calls gave away that a great deal of work was still being carried out to get it all moving), while the auditorium was still in chaos, with the circle fronts covered in scaffolding as plasterers and painters worked to restore the detailing hidden for so long by the bulky, obtrusive lighting bins that were removed during the fit-up. Similarly, work continued on the show in a rehearsal room on the other side of London; it would be a couple of weeks before the cast moved onto their set.

Indeed, they would never get to see some parts of the set. When the set for Fagin's Lair arrived on stage, a meeting was held, some fraught discussion took place and Anthony Ward returned to his studio to design a replacement. A few days later the original set was taken out of the building. Its replacement would not be ready for some weeks. The carefully prepared rehearsal schedule was immediately thrown into chaos since that set is on stage for half of act one and about a quarter of act two.

But there was always something to remind you of the goal. On Oliver!, the first of these occasions was the final run through of the show in the rehearsal room at Sadler's Wells. Though by no means yet complete, the run allowed all those present to gauge the style of the show, to get some idea of the movement, to hear the songs, and to start to sample the performances. Back in the theatre, the stage crew were being introduced to the set and the many tricks it could perform by Kevin Eld, Will Bowen and their Modelboxproduced videos showing the computer generated animations of the transformations planned at various points in the show. The crew would watch the video, then discuss how to achieve the transformation for real, then go and do it. Many of these sequences were eventually modified or cut from the show, but the videos at least got the crew

off to a quick start.

Then the cast arrived in the theatre, rehearsals started, and all notion of time passing out in the real world vanished completely in those 9am to 11pm days. With the cast on stage, changes happened. A virtue and vice of director Sam Mendes is his willingness to make changes - a vice because hours or days spent setting up one sequence of events can be swept aside, but a virtue because the replacement version will usually work better.

Over all of this, David Hersey carried on lighting. His ability to deal with so many sources of information while still concentrating on achieving the look he wants to see is incredible, as is his ability to 'give way' if a lighting state he has created doesn't meet with the approval of the director or designer, and to change his approach if changes to the direction or choreography alter the sense of a scene.

A few days before we were due to start previewing the next 'uplift' to the spirits arrived with the arrival of the orchestra. Suddenly we were doing a 'proper' musical again. Then the new Fagin's set arrived; the show almost seemed complete. Two previews were lost while the new set was worked into the show. Jonathan Pryce looked enormously relieved to actually get into his lair for the first time, but for the next two days it seemed like every time he was about to do a song there was a set problem and things ground to a halt again. He started doing impressions of past London Palladium stars, and just playing with his lines. At the end of 'Reviewing the Situation', the set started trucking off and jammed. Pryce, to the tune and without missing a beat: "I think I'll have to sing it all again."

Even as we start previewing, problems remain. The dog, for example: we've been through five or six, and still can't find one that both looks menacing enough to belong to Bill Sikes and is well behaved enough to take the stage. One was great until an orchestra started playing. Then it just started barking along. An appeal goes out on 'Schofield's Quest' on TV. One night, the perfect dog walks past the stage door. No-one manages to catch it.

The whole end sequence also remains a problem. No-one can quite work out how to deal with Nancy's reprise of 'As Long As He Needs Me' as she returns to the East End to rescue Oliver. At one point, out of desperation, we use a 'dot' gobo. As this is discussed, Sally Dexter spends 20 minutes just 'playing' with these dots. Then they are cut, and the lighting changes to moonlight gobos running down the towers.

Then on to the end sequence on the rooftops. Originally this was a perfect advert for pitching DLCs - the crowds moved out to the corners of the stage and the light curtains followed them. That got cut. Then the light curtains just followed the cast downstage, also lighting smoke and so hiding the chimneys being set upstage. Then a snap to gobos on Sikes. Then Sikes is shot and left 'frozen' in mid air in front of a huge moon. In the end both the flying wire used to suspend him and the moon are cut. The ending now 'flows' much more quickly.

A very late preview. We finally run the four ESP snow machines which have been wrapped in expensive marine soundproofing material and rigged and ready to go for a month. The effect isn't quite worth the effort but, two days later after some tweaking of the machines, it adds enormously to the scene. The smoke also starts to improve as the operators get the hang of the two Skywalkers and the JEM 1000 mini low-smoke machine. Sadly, the audience start to cough as soon as they see the merest hint of smoke, which rather spoils the effect in some scenes.

And so on for two weeks of previews; lighting and technical work in the morning, cast on stage rehearsing in the afternoon, performance in the evening. It is not the best way of working, because any changes made are not seen until that evening's performance, and, apart from minor changes to lighting levels, cannot then be corrected until the next day. Added to which is the fact that every time David Hersey wanted to escape from the circle into the lighting box he had to sneak through the door labelled 'Ladies toilet'!

At some point before the opening night, the show is meant to be 'frozen', to allow a final settling in for the cast and crew before opening night. The date for *Oliver!* being frozen kept changing. Changes finally stopped the day before we opened.

Opening night. A star studded affair, though most of the stars are in the stalls and so we can't see them from the lighting position at the back of the circle. The show is booked solid until next April, yet somehow its future seems to depend on this one night . . .

And the night isn't perfect. For most of the show it goes very well, with MD Martin Koch setting off into 'Food Glorious Food' at a rip-roaring pace. But problems appear in Act II. One of the brick sliders sticks in the middle of the stage, becoming a mysterious monolith parked in front of the Bloomsbury Crescent. Sally Dexter, bless her, works it into her performance. A piece of action gets quicker, so a reset cue doesn't complete, so a VL6 makes a rather-too-dramatic appearance in a scene. The smoke in the Three Cripples pub is a touch heavy, so the boat that sails across in the background (nicknamed Betty Boatways by DSM Camilla Clutterback) looks like a mysterious ghost ship.

But everything else is fine, and the audience seem to like the show and love the performances, especially from the children playing Oliver and Dodger. They start the trend for booing the baddies and cheering the goodies in the curtain call that still happens after every performance. As the cast come back downstage for another call, Cameron Mackintosh dances a little jig at the back of the circle. Sam Mendes cries.

Lionel Bart's Oliver! is back in the West End.





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## **DISCO MOVES**

WWG go original in London and Aberdeen. Lightfactor give a new look to an old Locarno. Ruth Rossington reports

There has been something of a revival of late in the fortunes of discotheque. For several years the industry has been heavily in the doldrums with a continual head-on dash with the recession. Possibly, the biggest victims were the installers who fell by the way as 'push' came to 'shove' and eventually to 'goodbye', to leave just a few main players. With the news in late December that European Design Group had gone into voluntary liquidation, there's little to be complacent about, but if the recent spate of openings and re-openings is anything to go by, the signs augur well for a brighter future.

In defiance of these times of change, several clubs have stood their ground and weathered the storms. One such is London's famous Camden Palace which recently re-opened its doors after a major refurbishment. When the club first opened, it featured one of the seminal discotheque lighting designs of the decade. Tony Gottelier's original scheme survived the first 12 years of the venue's existence, and was probably the first moving light rig in the UK. The animated ceiling panels which changed the shape and direction of the roof, the effects lighting which descended on the stalls, and the inflatable characters which became synonymous with the Palace, set a new benchmark for the industry.

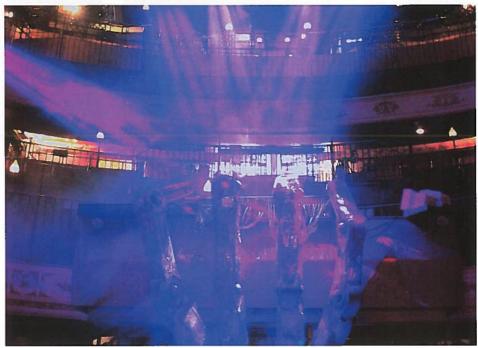
Among other innovations of the time, the Palace boasted the first GLC-approved laser installation in London, and the first truly 'intelligent' luminaires - the now defunct Pan Cans, designed by Gottelier's partner, Peter Wynne Willson. Though people may now find it hard to believe, it also featured the first generation of smoke machines.

This was the period when Steve Strange, Rusty Egan and the rest of the Visage crew were fronting the place, and when the Palace had the same street cred that the Ministry of Sound or Club UK has today.

With the latest refit, the history of the venue has been matched against its future, and with a reputed £2 million made available by European Leisure for the refurbishment, it has re-entered the arena as a serious contender. The original features of the Grade 1 listed building have been carefully restored to recreate its original splendour, with ornate plasterwork and gilt edge detailing adding a classical feel to the venue. Set against this backdrop is a futuristic techno-look with gleaming silver corridors, distressed metalwork and wire meshing giving a slightly unsettling feel to the whole, which is underscored by gigantic mechanical claws.

For the technical installation Dave Chipping of European Leisure reassembled the original design team of Tony Gottelier, who project managed the whole installation the first time round, and Stephen Court who was originally brought in by Gottelier to implement the sound system. Things were naturally somewhat different the second time around, with Chipping wishing to take a more active role in the design process. It was his input that led to the rather unconventional positioning of the lighting rig which has caused a certain amount of comment. One of the most successful aspects of the new rig is the first outing of the Martin Robocolor Pro 400, of which 24 are used.

Gottelier worked closely with Ian Kirby of Martin Professional UK, who were European's



The strange contrast in styles of the impressive interior of Camden Palace, above, and below, perched above the dancefloor, a Soundcraft Vienna II and D-Mix 1000. photo: Disco Mirror



appointed lighting contractors and John Bowman-Daniels of DBI and Videotheque, the installers, to achieve the desired result. Alongside the new 400s, there are eight Martin 1220s, four of the company's recentlylaunched Centre-pieces and a pair of 1200 Robozaps. These work alongside eight of Coemar's Versatile effects lights and 50 Parcans. Edging the rig are numerous pieces of orange and cyan neon supplied by Expo. There are several unusual lights in the rig including the so-called 'audience blinders' more often associated with rock and roll. These latter give a hint to the overall design ethos which was to create much more of a concert-type feel. WWG's involvement with Pink Floyd's world tour this year has obviously rubbed off, and it would appear that the rig is inspired by the Floyd's circular moving truss.

Lynx Lighting were brought in to implement the moving rig and the Axon Digital Design duo of Mick Martin and Rowland Hughes were responsible for the programming and configuration of their ShowCAD control system. Providing some of the atmospherics are Martin smoke machines and a Laser Grafix Prisma laser.

It was appropriate that Stephen Court should

be recalled to the venue to undertake the sound upgrade, for the refit coincided with Court Acoustics' 20th birthday, and is probably the company's most sophisticated installation in all that time. The main FOH system is a 5-way version of the Black Box system - the Club 8000 System. It comprises a stereo flown array of 3-way high bins, fitted with eight 12" drivers on conical horns, 16 double 1" titanium drivers on wooden bi-radial horns and 16 HF bullet radiators. The deep rumbling

bass, an integral feature of every self-respecting club, is provided by eight 15" drivers in Court bins, and eight 18" drivers in the new DSB2000 'V' hins

In total, this adds up to a massive 15,000W FOH, driven by Court's CN240 5-way crossover and C Audio's 3180 and 707 power amplifiers. The flown and stage side fills are Court 3 and 2-way full range systems that used to be the Palace's FOH system from the original installation and the first refit. Stage monitoring is provided by six Court SM750 bi-amp high power wedges. The lower and upper circles are augmented by a pros arch array of four of Court's new LX2 12" compact trapezoids. The under circle has four TR250 10" trapezoids and the upper circle features eight TR50 miniature surround sound speakers. Up in the the 'gods' bar, which is intended for private function use, there is a full range system comprising six LX1 8" units and a SUB600 sub bass unit. This system is part of the delay auditorium system, but is also capable of being driven on its own for private functions.

All the auditorium speakers are delayed with a Klark Teknik digital delay, and BGW power amplifiers. A total of eight Court GN60 inductor-based graphic equalisers are used





A full technical cabaret goes through its paces nightly at Caesars in Streatham - a fitting successor to Talk of the Town.

photos: DM

throughout the venue for speaker/room interfacing, in addition to a Klark Teknik DN3600 digital programmable EQ in the FOH effects rack. This latter is an important facet of the sound provision since the Camden Palace will change from theatre to recording venue, to live venue, to discotheque and back again, and the nice thing about the DN3600 is that it allows several EQ programmes to be stored.

The central control area, also designed by Court Acoustics, is ideally located, being suspended from the front circle, and features a Soundcraft Vienna II live console. Slide-out angled racks beneath the Vienna contain Echo, reverb, compressors, limiters, digital EQ and all the other effects necessary for live and recording purposes. In addition to 24-track recording facilities, there is also a mono line output for film and broadcast interconnection. To the right of the live mixer is the discotheque control area featuring the new Soundcraft D-Mix 1000 eight channel mixer which runs the turntables, DAT, audio and video cassette and twin CD. The decision to go with the new D-Mix 1000 was largely down to two of the clubs top DJs, John Saunderson and Phil Murray who got their first sight of the desk at the PLASA Show.

At almost the opposite end of the country from Camden, a club in Aberdeen was ushering in the New Year with a new look. And once again the team of Wynne Willson Gottelier was called in to undertake the redesign. The remarkable coincidence here is that it was this very club, then known as Gabriels, which Tony Gottelier moved on to work on following his first Camden Palace experience. A case of history repeating itself. Located in an old chapel just off Union Street, in Aberdeen, the club's association with things angelic has continued with its metamorphosis into the award-winning Ministry of Sin (Lucifer was once an angel too, remember).

This latest refit was the venue's fourth lighting upgrade and the second under the Ministry banner, accompanied by a sound enhancement also. Two problems had to be tackled: firstly, there was a lack of robotic lighting in the original design, partly due to budgetary concerns, and secondly, the sound system was under some stress from today's musical demands.

The WWG crew, headed up by Jonathan Gottelier, and teamed with Hutcheon Services who handled the electrical work, installed four Roboscan Pro 218s over the dance floor and a couple of Robozap MSDs to sweep the floor with their distinctive moving fan of beams. Owner Mike Wilson was keen to take the effects lighting into the main body of the club

so two Roboscan Pro 1220s were installed at the far end of the long, narrow main room, to send beams and rotating images through the full length of the club, utilising the walls and vaulted ceiling as projection screens. The main room lighting was further enhanced with the addition of 16 Robocolor 2s sited at the base of the original arched ceiling beams. This worked especially well, with the light beams mirroring the ceiling beams and animating the ceiling.

A ShowCAD system is now in control, and again, Mick Martin provided the programming. When it came to sound, Harman's Dundee-based distributor and rave sound specialist, Les Patterson of Sound Control added two JBL TCB cabs, two specially manufactured JBL loaded low-mid cabs, additional JBL reinforcement around the club and reconfigured much of the existing equipment.

For the final part of our journey, we must return to London and to Streatham, where the recently conceived Caesars cabaret club/ restaurant was inviting the industry to admire its new figure. It's the first venue of its type to grace the metropolis since the close of the Talk of the Town several years ago. It is fitting that it should, for it boasts a rich lineage as a live entertainment venue, originally opening as a Locarno dance hall in the twenties. The club is independently owned by a consortium, which includes the owners of Croydon's Coliseum who also designed and project-managed the multi-million pound venture.

Lightfactor were approached to submit a specification that would fulfil the lighting and sound criteria. The brief called for a design that would obviate the need of guest artistes having to bring their own PA equipment into the club, and one which would also prove chameleon enough to adapt to the changing nature of the venue. Having won the contract, Dick Carrier of Lightfactor undertook the lighting and sound design and oversaw the installation work which was carried out by Caesar's own contractors.

It was at PLASA 94 that much of the decision making on the final choice of equipment took place. And for once, Carrier's legendary eloquence was tempered a little by the fact that he was able to demonstrate to the clients first-hand the qualities of a trio of products - High End System's Cyberlights, Avolites' Sapphire lighting desk and the Allen & Heath GL4 sound console - all under one roof. The visit proved a catalyst for the main part of the installation.

An over-stage grid forms the lighting superstructure that also carries three curtain mechanisms. State-of-the-art stage lighting instruments were chosen, with this being the first UK installation of the Cyberlight CX, alongside a substantial conventional rig. The

dimmers are Light Processor's Q packs and at the heart of the lighting system lies an Avolites Sapphire control desk that resides in the engineer's gallery, along with the Allen & Heath GL4 front-of-house sound console.

One of the main acoustic parameters was that the room should require no infill speakers and that it should, in effect, be a touring-style system in an installed situation, dealing with acts demanding a fusion of rock and roll and theatre techniques. The resulting hybrid configuration was a custom box design by Court Acoustics based on their TR250 and TR750 enclosures, with the company also designing the comprehensive patching system.

The front-of-house rig is flown in two clusters either side of the stage with four DSB 2000 sub-bass units under stage. Amplification is provided by 19 Citronic PPXs, whilst the monitor system consists of 11 Court SM750 wedges and another GL4 desk. This latter was chosen for its ability to multiplex between FOH and monitor duties so at Caesars, monitors can be mixed from the front if desired. The technical directive also included four video cameras and a production mixer for relaying live action onto two large screens.

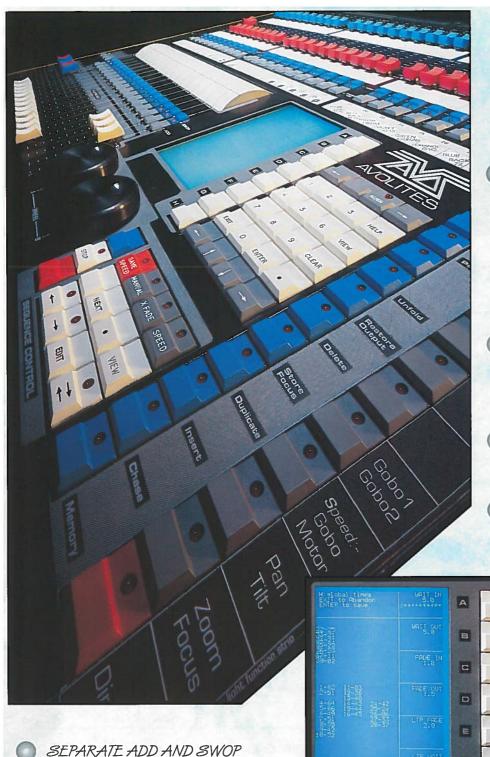
The opening night of Caesars saw the Three Degrees topping the bill, along with the original Tiller Girls, which is appropriate really since the industry danced its way out of 94 and is now hot-footing it into 95.



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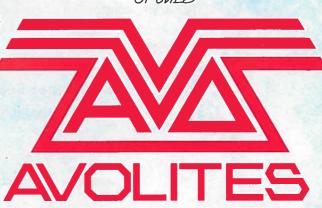
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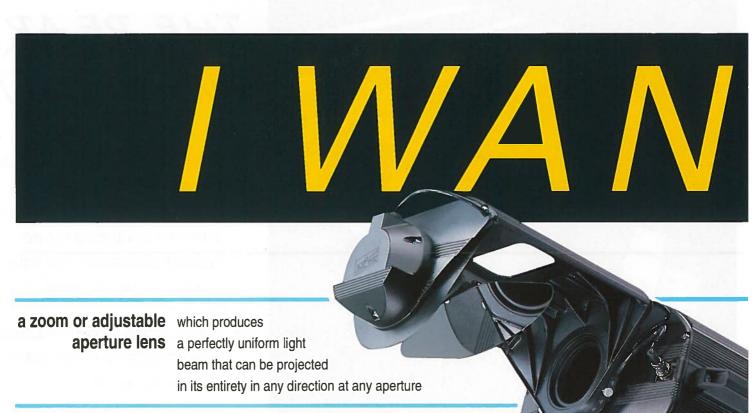
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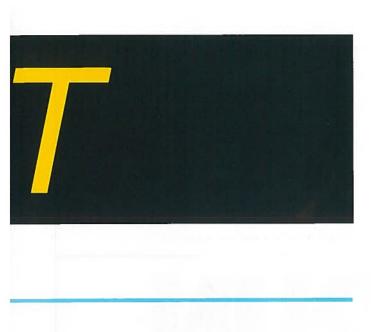
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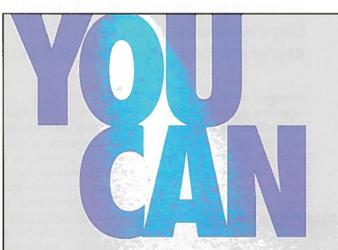


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# ON TOUR

#### AND PRODUCTION NEWS

#### Ryuichi Sakamoto

Hammersmith Apollo

# LD: Andy Liddle SD: Akira Shimura

It was no surprise that only the stalls were opened at what remains London's largest capacity cinema for Ryuichi Sakamoto. Most of you are probably familiar with the name, but it may not have registered fully. Ryuichi is a well-regarded musician who earns his keep producing well-crafted film scores. Easily pigeon-holed alongside Philip Glass and Yanni, his work is distinctive for its inclusion of vocals, used mainly as an adjunct to the orchestral arrangement; it's not so much the lyrical content that's important (not that his lyrics are irrelevant), but the dreamy way in which he integrates the voice to the music. Despite the assertions of one or two crew members and stage hands who attended a full day of rehearsals the previous day, this is not elevator music. And fortunately, it doesn't have the bland lack of character that typifies music of that ilk.

However, what is required to overcome the

sometimes soporific effects of his seductive melodies is a visual aspect to hold the attention. His music is designed to underscore a visual medium: to hear it performed live without any visual support would be as meaningless as Del Boy Trotter listening to 'Come on Home you 18 Wheeler' as he drove his Reliant Rialto down the A3.

In recognition of this fact, the stage is dominated by video projection. Interestingly, Ryuichi has not always taken the easy route and lifted footage from the movies he scores, but has instead commissioned work specifically to accompany his own show. Subtle and professionally produced, it works very well, neither interfering with, nor overwhelming the music, but quietly embellishing it.



LIGHTING

Lighting-wise, LD Andy Liddle had lots to play with, but little to do. For many of the songs the most that can be expected is a discreet wash of the stage, leaving the performance area free for the projection effects. The rig is simple in

configuration - a front and rear 40' truss. The front supports three Barco projectors, four Cyberlights and two pairs of Lekos focused down onto Sakamoto and his crystal-voiced vocalist. The rear truss has a selection of Pars, all sporting Colorams and little else.

The stage is also simply laid out - an assortment of risers support the percussion, violin, bass, keys, guitar and vox - and surround the man himself centre stage at the

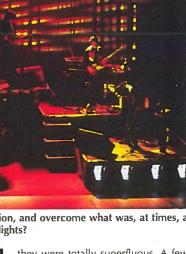
grand piano. Beneath three of the risers are horizontal strips of four TV monitors, while above and to each side are two 6' x 4' projection screens with a further 12' x 15' projection area used in the centre of the full width rear cyclorama. All the video is uniform: that is, the image is constant to all screens simultaneously with no visual trickery or image manipulation. The video is integrated, not gimmicky. The Cyberlights are used, but not wantonly - the occasional twinkling gobo here, a splatter of break-up pattern across the cyc there.

Once or twice, Andy really let his hair down and focused narrow beams onto each of the musicians, but even here restraint was the watchword - no colour, just simple tight beams in open white. This is no critique of Andy's operation

"... there were points early on when it was just so much acoustic soup, but he built slowly, solidly and steadily and, as his personality imposed itself more firmly upon the audience, the more engaged we became ..."

or creative ability - he is a vigorous and accomplished LD - it's just that in this instance he was obliged to work to a strict script. That being said, and considering this was his first show, after only one day's rehearsal his cueing appeared spanless.

If criticism can be levelled, then it should be aimed at the equipment: why such a passive show should require eight Cyberlights (there were a further pair on the floor each side of stage) is beyond me - like a pork chop at a Bar Mitzvah,



The visual aspect of the show was needed to hold the attention, and overcome what was, at times, a soporific effect, but was there a real need for all those Cyberlights?

they were totally superfluous. A few more ellipsoidals and maybe a couple of gobo rotators would have been more than adequate. Still, Neg Earth Lights were probably pleased with the extra revenue, and it was nice for Andy to have the opportunity to try out these excellent lights!

#### SOUND

Sound-wise the Audio Lease PA was faultless: like a freshly-poured glass of Guinness it was clean, crisp and well-defined. Aurally, when you drank of it, the sound blended smoothly into long languorous gulps. With the balcony unsold there was no flying PA and the cabinets were stacked two high each side of stage. However, the sound quality (mixed by Sakamoto's engineer Akira Shimura)

was as good upstairs as it was down. With pressure levels not being an issue for this type of music, it was noticeable how effortlessly a good balance could be achieved and controlled.

Ryuichi's initial rapport with the audience was awkward and uncomfortable, not helped by his

introduction of Holly Johnson (Frankie Goes to Hollywood) who recorded 'Love and Hate' for him. Holly, who was in the audience, declined to stand, to the obvious embarrassment of Mr Sakamoto. However, he warmed up gradually and by the time he regaled us with a particularly illuminating anecdote about movie director Bernado Bertolucci, we were all enchanted and right behind him.

As I've said, this music does require something extra to hold the attention - there were points early on where it was just so much acoustic soup - but he built slowly, solidly and steadily, and as his personality imposed itself more firmly upon the audience, the more engaged we became. If you have a passing interest in this so-called modern music, but have thus far resisted the urge to come out of the closet, I can recommended no better introduction than this show. But be prepared to stick with it.



LD Andreas Kisters plays the blues on Udo Jurgens and his perspex piano.



A symmetrical spray of primaries reveals Udo's absence.

". . . a show like this is hardly demanding on

the PA in terms of power. For example, many

of the audience found the sound of the cooling

fans on the house followspots intrusive . . . "

#### **Udo Jurgens**

Bremen Stadthalle

#### LD: Andreas Kisters SD: Sherif el Barbari

'Schlager Music', as performed by Udo Jurgens, is the epitome of German middle-of-the-road pop culture. Physically a cross between Cliff Richard and Liberace, Udo has the polish and enthusiasm of his erstwhile British comparator, but the facial skin tone of the now sadly deceased king of kitsch. His complexion is shiny and taught, his hair dark and still quite luxuriant, despite his sexagenarian credentials, and his voice is rich and fruity.

On a cool drizzly day in Bremen the show is made more bizarre by the presence in the car park of a gypsy encampment of body builders, here for a contest in the adjacent hall. Their caravans encircle the Stadthalle: small gaggles of peroxide blonde Euro-mamas crowd around camping gas stoves outside and exchange tales of Neanderthal love trysts in the swirling steam, whilst the focus of their ardour, men with minor mountain ranges arrayed along their arms and legs, mingle with the throng of sub-teen boys who crowd the doorways hoping to catch a glimpse of Herr Udo. The 'beef-fest' is in town for six weeks, Udo for just one day, and thus the eyes of Bremen are upon this teutonic Matt Monro - for today at least.

#### LIGHTING

This show raises some notable questions, not least of which is what are L+SI doing covering a show like this for the On Tour slot? The answer is premieres: this is the first tour ever with a Celco Aviator console, the first tour featuring Westfalen Sound's self-developed GAE PA system, and the first tour for the new German answer to the Vari\*Lite - the PML Contro light. Developed by Amptown, the latter's inclusion is perhaps the most surprising. Actually a Mark 2 version (the Mk1 was so disastrous that they don't talk about it), this 1200W HMI automated lamp is a remarkably smooth performer. It features 36 colours (with colour mixing available), seven rotating gobos, frost, soft and hard edge beams, and is dimmable. The only thing this instrument lacks, and it glares rather obtrusively in this show, is the ability to fade

Andreas Kisters, who runs these lamps from an MA Scan Commander, has been lighting designer for Udo for three tours now, and also has under his belt, Bap, Kraftwerk, Udo Lindenburg (if you've never seen him and get the chance, go) and, inevitably Peter Mafe. The tour has been running for 53 shows now (only 90-odd to go) and so far the Contro's have behaved themselves, as Andreas explained - "I've had no stress from these lamps, just the odd judder here and there."

He's the kind of LD who likes to do it all himself. As well as the moving lights, he calls spots, operates the Color Mag controller and runs all the conventional lamps from the Aviator. How the Aviator came to be on the tour is another story suffice to say that LMP, the German distributors, offered Andreas the chance to take the board out after a brief in-house training session. His verdict was emphatic: "I knew within 10 minutes this desk was perfect for me. Single channels, lots of memories and lots of chases. What I liked most was the ease of programming and especially live re-programming. I knew I only had a few days of rehearsal and much of that time would be spent getting used to the new Contro lights. Of course, I would be re-programming during the early part of the tour." Again he reports this as a 'no stress' piece of technology: "The only thing I found a little strange were the faders, which were difficult at first, but now I think they are a great idea - clean reliable and smooth."

The lighting system is also very clean, at Udo's behest. The front truss is folded in upstage, the back and sides are enclosed by legs and an RP screen, and the set is, although substantial (it supports an orchestra of 16), simple. Herr Jurgen, according to Andreas, has come up with a concept

for the opening of the show on each of the three tours he's designed for. "He has firm ideas about how he wants to appear, but he doesn't interfere,

and when I tell him a new suit he's trying on looks ridiculous or just doesn't work with the palette I'm using, he accepts it."

This show opens with the stage set concealed behind three roll-down screens that, from the moment the doors are open, display family album snaps of Udo. As the performance begins he plays a piano from behind the centre screen, silhouetted by a 2kW fresnel. A violin comes in stage right and picks up a solo; as it does so Udo blacks out, his screen rolls up, and in darkness his perspex grand piano is pushed downstage and the screen drops behind it. A simple trick, revealed as he recommences playing, but striking nonetheless, and one which elicits a warm welcome from his fans.

Andreas lights the stage in uncomplicated fashion. Pars all around the box-shaped truss are used as washes upon the band, whilst the lion's share of the work on Udo is left to the Contros, house spots and two Molemags to the rear, fitted with ACL bulbs that provide fierce backlight when the occasion demands. Andreas has the MA Scan Commander linked through to the Aviator so that the latter can take precedence on cues, although he shifts quite comfortably back and forth between the two desks. In the sub-groups of the Aviator, he has one block of 10 permanently in use as a sort of safety set of stock 'looks' with the two consecutive sets of 10 channels assigned to alternate between songs with distinct prepared cues.

Andreas rarely has to busk numbers as Udo sticks to a tried and tested routine, but the between-song banter can be extensive and requires variety to keep the visual aspect moving along, hence the heavy reliance upon the safety set.

#### SOUND

Sherif el Barbari was a lowly stage hand when I first worked with him in '83. Now Udo's front-of-house sound engineer, he's not only an adept sound man (he counts Buford Jones amongst his influences), but also the designer of Westfalen Sound's flying systems for both their new GAE PA and their older Clair Brothers S4 system. (A flying system that not a few Clair Bros' tech's have been keen to praise). He doesn't, however, get involved in the technicals, satisfied to know how to work it, but not how it works. Not the first sound man to work by feel, his modesty belies a sensitive touch.

The GAE PA looks like everyone else's with a wedge-shaped box, two types high/mid and bass cabinets. The only restriction put upon the box size was that a pair side by side should appear identical to the fascia of an S4. The low cabinet is a twin 18", the mid is two 12" (all RCF speakers)

with a JBL 2450 and three Beyma bullets. Both these are driven by German-built amplifiers, manufactured by Camco. The 3k and 1.5k units are

big (3U enclosures) but run remarkably cool - even when driven hard the temperature-switched fan cooling system rarely cuts in (as proven by a rigorous test with Jethro Tull in Turkey where they were subjected to an ambient 55 degrees heat).

To be honest, a show like this is hardly demanding upon the PA in terms of power. For example, many of the audience found the sound of the cooling fans on the house spots intrusive, so little can be said about the power performance. The sound from the stage was well controlled and all the band and backing vocalists use In Ear monitoring (Udo can't bring himself to adapt), and although the drummer has a little 24-channel set-up for his own mix, he doesn't actually touch it, leaving it as set by monitor man Matthias Klette. Sherif is also sound engineer for Nana Mouskouri and Howard Carpendale, so it's no surprise that he's adept at finding the right balance for such a show. With an audience ranging from nine years of age to 90, self control is a necessity and the sound was well inside the comfort factor.

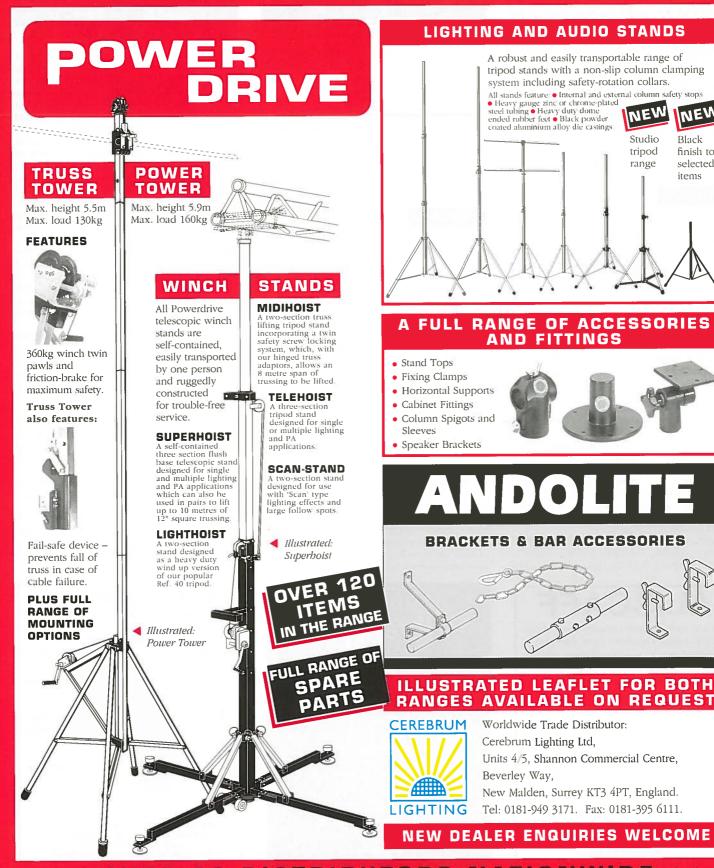
Udo has an easy manner with his fans, but unfortunately my German linguistic abilities end with ordering breakfast and negotiating for beer and curry wurst, so I was unable to catch his humour. What I did notice was that old and young alike were laughing at his jokes, and tapping toes to the melody. A real all-rounder and, despite the language barrier, good entertainment.

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#### Roxette

Wembley Arena

# LD: Pontus Lagerbielke SD: Mattius Dahlen

'A table of delights' is one dictionary definition of Smorgasbord, and is also a very apt one for Roxette's latest show. Of course the name of the tour, 'Crash, Boom, Bang' instantly conjures images of crass Euro pop at its worst, all homogenised muzac with a grotesque anglicised lyric on top. But, in fact, this is the only hint of the band's Scandinavian origins and is quite clearly a tongue-in-cheek reference to the progenitors of such plop. Roxette's presentation this time around is a rich confection of pop, rock and ballad, and is clear evidence of the band's maturity. They have obviously set out their stall with the fixed intention of sustaining a following long term, and on the evidence of this Wembley show they deserve to succeed.

#### SOUND

The entire production for the tour is Swedish, with one exception - the PA is provided by Clair Brothers Audio. But even then most of the crew and much of the control and effects system is from the band's homeland. Clair Brothers have provided 54 S4 cabinets which, on this occasion, are being driven by Crest Audio 7001s and 8001s, instead of the usual Carvers. In the words of the doughty Rex Ray, Clair's only US crew man on the tour: "We are trying out a couple of systems with these amps just to see how we get along." As with most things Clair, comment on why such things are done is strictly limited. In terms of the performance of the two amps matched to S4s you would be hard pushed to slide a cigarette paper between them - presumably there are considerations of price and durability that will determine whether CBA replace all 1,500 or so of the Carvers they currently own with Crests in the future.

Mattius Dahlen is front-of-house engineer, and works regularly for Roxette out of LT Audio (Sweden) who are providing the PA control gear. Two Malcolm Hill desks configured 26- and 38-way are used out front, with two Ramsa 840s for monitors. Amidst the effects is an M5000 from TC Electronics and Mattius is particularly fond of this 24 bit effects controller.

The stage is wide open and with two drummers and two guitarists, a sizeable monitor system is required. Monitor man Lars Jungmark has Clair



Two of the many different looks that LD Pontus Lagerbielke likes to give to Roxette's performances.

12AM wedges at the heart of the system. Driven by BGWs these single 12" cabinets were custom built for Audio Rent. For the drummers there are a pair of  $2 \times 12$ " units, and flown each side of stage are two pairs of M4s for side fill.

For what appeared a 'big hang' by Wembley standards (25 cabinets a side, plus a four box delay cluster), it was a very comfortable show. Mattius does a creditable job and I can offer no greater praise than that landed upon him by Rex Ray: "This guy is a very good engineer, one of the best I've worked with."

#### LIGHTING

The lighting is all Swedish, supplied by Lightman and Vari-Lite Sweden, and is fully crewed from there. Apart from the 54 VL5s and 22 VL4s, lighting designer Pontus 'Bullen' Lagerbielke has specified a range of lights you would expect from any front-line international lighting company. 16 Clay Paky Super Scan Zooms, 24 2kW Cadenzas (fitted with Color Faders), 13 Rainbow light curtains and four Solar 575 effects projectors.

The truss configuration appears simple enough, but belies the complexity of tricks Bullen has had built into it. To the back of stage hang two trusses, one beneath the other, whilst above the main stage is a diamond shape some 50 feet across, and beyond that to the front of stage two further trusses parallel to the diamond's leading edge. On the floor to the back of the simple raked staged set are four 30 feet high self-climbing towers with 16 feet wide 'T' pieces on them. The rig has most of the lights uniformly spread about it, five of the light curtains are arrayed behind the set, eight of the VL5s are down there too, and the only six Parcans in the rig are clustered about the drummers.

What makes Bullen's show sympathetic to the style changes of the band is his use of drapes. "I don't go more than three songs without a change of look," is an understatement. The cyc changes from grey to white courtesy of a Velcro tear off;

panels drop in from the diamond and a song later are ripped away. All this happens with alarming frequency. "Over 500 metres of nylon rigging line is used for the drapes; there are so many ropes and pulleys everywhere that my stage carpenter reckons you can't walk on this stage unless you know how to sail." The different drapes and their varied positions are used in combination with the lights to variously provide intimate, garish or sumptuous surroundings.

The short acoustic set, especially the song 'Listen to your Heart', was beautifully enhanced by four simple vertical silk strips, no more than two metres wide, hanging from the rear of the diamond. One strip was intentionally pulled some three metres to stage left to break the regularity. The silks were lit by just two VL5s each in pastels of orange and blue, whilst the musicians were lit by the bare minimum white front light. All contrived to bring a brief intimacy to this dusty old barn and Bullen even killed the console lights of his Avolites Diamond II while the acoustic set was played.

Then, suddenly, it's an ugly industrial look; the white socks of the towers drop away, lights inside these and the rear trusses highlight the metal work in cold colours, and the rear truss descends and articulates in the middle - the stage is transformed. Bullen (aided by Arne Dahle who runs the Vari\*Lites), works hard at his craft and, along with the undoubted labour of his crew, produces a very eye-catching show. As he said in justification for his use of color faders, Super Scan Zooms and Vari\*Lites: "If you can have all these options, why not use them?"

Marie the vocalist and Per the songwriter are both very handsome physically, and in the late eighties and early nineties these two produced some excellent pop songs. Though they've lost neither their musical ability, nor their looks, they have expanded their repertoire and moved on from a purely pop persona. The result is good entertainment.



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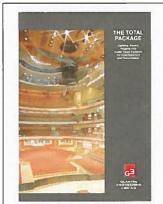
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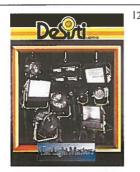


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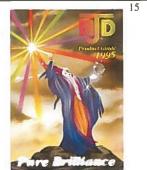


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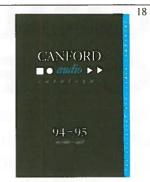
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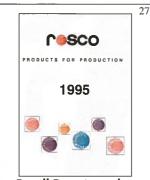
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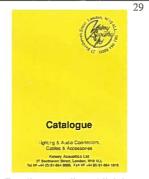


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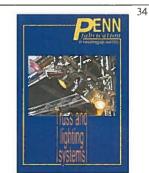
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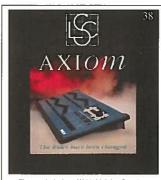
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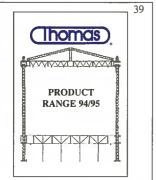
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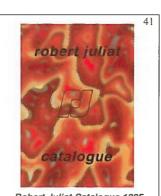
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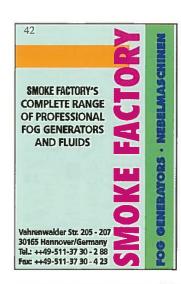


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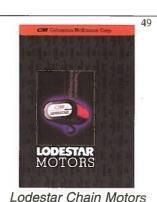
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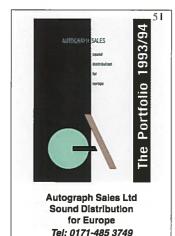


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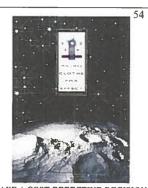
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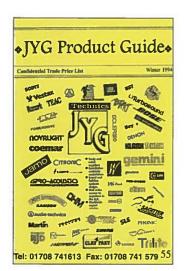
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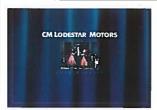


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John Offord Profiles the International Sound Giant's Borehamwood-based UK Distribution Arm

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Most of you will be well aware that it also indicates far more than just that. In fact, the Harman Group is a huge international US-based giant, with corporate headquarters in Washington DC, that produced sales in its last published quarter of over \$228,000,000. Tales of it becoming a billion dollar concern during 1995 can therefore be confirmed as an almost odds-on probability. In the professional audio field Harman have talent in depth in the combination of JBL, Soundcraft, Lexicon, Studer, AKG, Spirit, DOD,

Digitech, UREI, dbx, Allen & Heath, BSS and Turbosound.

Before we come down to earth and locate ourselves in the more humble byways of Borehamwood, and to further set the operational scene, Harman International has three strategic core groups: professional, consumer and automotive OEM. In turn these are supported by the manufacturing, marketing and distributing groups. Harman Audio sits comfortably in the latter, alongside its sister operations in Germany, Belgium, France and Japan and Studer Professional outfits in Canada, Germany, Singapore and Japan.

Having moved to its present site in mid-1993 following a 10-year stint in Slough, the Harman Audio operation had barely got its feet under the table in its new home before being given distribution of the AKG range of products as part of its product portfolio. By the Summer of



Jon Bickle, David Gerrard and Bruno Wayte pictured in the foyer of Harman Audio's Borehamwood headquarters.

1994 it had a new managing director in the shape of David Gerrard to cope with too.

Nothing had gone wrong, of course. David came in to take over the chair of Philip Hart, then also managing director of Soundcraft,

"JBL will be launching a new product at NAMM in the US and then at Frankfurt, that will open up a completely new market for us."

when he was elevated to the position of group president for the Professional Group of Harman International companies. And that is where I shall stop in terms of company structures, because if you are that interested, I'm sure a telephone call to Borehamwood will bring a copy of Harman International's impressive

1994 Annual Report directly to your doormat.

David Gerrard isn't new to the audio industry and part of his background can be traced to the consumer area where he still has contacts. Whilst admitting he doesn't know the professional side as well, he sensibly figures that his most recent experience - in telecommunications - stands him in good stead. "Telecommunications is a very high service business, so I've obviously got some key elements of my philosophy already mapped out, as this, too is a high service business. My contribution to it is not to try and learn all about the products, because I've got guys here who know that side of things much better than I do. My job is to provide the platform from which all of that operates, particularly as we have a surprisingly rapidly expanding business.

"The consumer side of the company is up 140 per cent year on year, whilst sound reinforcement growth (under sales manager Bruno Wayte) is well into double figures, and

professional products (under sales manager Jon Bickle) is also showing rapid expansion - most particularly as the AKG name begins to redevelop its status now that Harman have taken ownership of that business. The first few months of handling AKG were obviously a learning curve, but we are now beginning to see the benefits of the effort that's been put in. It's starting to

come through, both in terms of new products and re-building the distribution within our own image.

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The Allen & Heath GL4, launched at PLASA, is an 8 buss console designed for FOH or as a monitor desk, with recessed switches which change mode without any loss of quality. The GL4 completes the range of live mixers, which includes the compact rack-mounted GL2 and GL3. The GS3 and the automated GS3V in the range of studio desks is now joined by GS1, a quality home recording console.



Steinberg has now become the 'industry standard' music software and is available on PC, MAC and Atari, from entry level to digital recording. The latest audio programme for the Mac is Cubase Audio TDM incorporating The Division Multiplexing technology from Digidesign. Steinberg are also introducing Cubasis for PC, a new entry level programme with Score printing and 64 x 16 tracks.





Sound Reinforcement Division: Pictured above left is the JBL Soundpower 1771. The Soundpower range covers installation (particularly successful in discotheques and clubs throughout the UK), touring and portable use. The total JBL range covers all aspects of sound reinforcement for the widest possible range of applications: touring, installation, AV, theatre, MI, studio and arena - not forgetting the vast range of JBL components that appear in many systems all over the world. JBL Electronics include the specialist analogue and digital system controllers, and the MPA and MPX range of amplifiers. The UREI Platform signal processing system is a customisable, modular system that incorporates a number of different processing functions. Pictured right is C Audio's top-of-the-range XR5001 amplifier. The full C Audio range includes ST, RA, SR and the new XR amplifiers which cover all applications for MI, installation and touring.

must do that. Speed and quality are highly important and I've got to provide the structure for that to work."

But what happens when the systems are sorted, all functions are set at go, and your product line-up looks impressive? Couldn't that be a formula for levelling down the imaginative juices and relying on the work put in by the design experts in various Harman development and manufacturing plants scattered around the globe?

"Harman obviously want to take full advantage of all the benefits of integration," continued Gerrard, "but at the same time they certainly don't encourage their distributing companies in each country to believe that they have a divine right to distribute their products. We, in addition, find that with some products we can complement our existing product range, and flexibility is, and always has been, part of the way that the company operates.

"Although the world is becoming more and more homogeneous, and we are seeing more and more similarities in more and more places, each market still has its own individualities, and the way a product portfolio fits together in the US, for instance, will not be the same as what will be required in the UK. Any distribution operation has to tailor its offering to the market. In some countries we have our own companies, such as here in the UK, in others it is by conventional distribution channels. It is symptomatic of a rapidly developing business, which ours is.

"That is what surprised me, particularly on the professional side. One had the image of consumer being the fast-moving side and the professional being the more 'staid'. If anything, the reverse is actually true."

And what chance was there to influence product development within Harman at large?

Bruno Wayte: "There is now a great deal of opportunity, and it's a situation that's improved greatly over the last few years. For instance, on one of the committee groups looking at new products there are representatives from

Australia and the Far East and two from Europe. Obviously our sales people at the sharp end also report back to us." (My notes aren't clear on the point, but I think it was David Gerrard who made the comment about Bruno - no lightweight in kg terms - 'making sure his weight was felt' when the committee groups were in session.)

Was there a tendency to ride into the market on the back of the strength of JBL? "We used to," admitted Wayte. "Obviously with such a large and well-established range it was difficult not to and other products could be sold behind JBL which was the catalyst and core brand. But if you now look at AKG, Allen & Heath and C-Audio and their new products



Phil Waters is Harman Audio service manager and a long-serving member of the Harman team who is well-versed in all the company's products, right through to 'historical' equipment that occasionally comes in for repair. Increased funding for the service department with improved facilities and the latest test equipment have seen a much faster service for Harman dealers.

these identities are now well-established." David Gerrard: "It's interesting to note that the growth rates of sales on the 'younger' products is actually faster, as JBL had started off at a higher level."

What is the relationship between Harman Audio and the group's UK manufacturing companies? "We shout at them a lot," said David Gerrard, tongue in cheek, of course. "We buy off them just like any other distribution operation around the world. However, we also work closely with them on design, and it is often useful that they are local. Obviously each element of the overall business does what it's best at. It is a vertically specialised business and it works better that way."

Harman changed the way they structured their operations two years ago when the professional side was split into two divisions: sound re-inforcement and professional products. "The product range was becoming so diverse that we needed specialist attention in each area," explained Jon Bickle. "Obviously we work very closely together, and we all know an amount about the other area and there is a lot of crossover with the customer base also very similar. I think by now we have also proved that we offer a better service this way."

Each division has its own sales teams, and if press release information is anything to go by, a very good relationship with its dealers and installers. "We've always sold through our dealers and never go direct," said Wayte. "We maintained this situation right through the recession and I think as a result we've come out stronger." To further back up the operation of their sales structure Harman Audio have added an acoustic specialist to their team. "It's a technical expertise that we're not trained for," explained Wayte, "and it means we can provide the sort of information needed for large installation work in particular. We can now more effectively cater for the consultants."

And Harman have confidence that there will

always be a big market for their products.

David Gerrard: "Someone observed to me recently that if you want to create sound you have to move air, and there's no digital way of doing that. So there is always going to be a market for loudspeakers. To move air is one issue, but the other is that people accept that sound is much more a part of life and they tend not to notice it unless it's very bad, and most of it is very good, these days.

"I think that this reflects the increasing art of companies like JBL on the one hand, and the skills of the installer on the other. It is now very specialised and it is perhaps the degree to which it has actually become a very specialist art is underestimated. On the consumer side there are developing markets for good sound to video and multi-media. On the professional side, things are obviously moving more and more into the digital domain."

Jon Bickle: "Taking up the digital theme, hard disc editing is coming down in price by the day and becoming more flexible. It won't be long before we have completely tapeless studios. In fact, they are already here, and the effects unit market will become less important because computers will be providing all we want. On the home front people are getting ever more used to superb sound and when they go to see a show everything has to be spot on. This is where several technologies merge, with lighting also involved."

Bruno Wayte: "If you take the discotheque market as an example, the standard of installation has improved dramatically over the



The AKG Tri-Power C5900 vocal microphone is the flagship model in the series. Major artistes who use the mic include Rod Stewart and Bryan Adams, and the unit is available in cable and wireless VHF or UHF formats. The past five years have seen AKG increase its share of the live stage performance market with the introduction of the Micro-Mic series in 1989 and the Tri-Power Series in 1992.

past few years. Things are done much more professionally now, not only to achieve a better quality of sound, but also to save the cost of call-outs if things go wrong. And, as if to follow their lead, we've had to make sure our back-up services are up to scratch too."

"The word that keeps coming through when you discuss things in this vein is 'expectation'," said David Gerrard. Computer technology has transcended the power of any industry to make full use of its capabilities. And as the industry accelerates its performance, the expectations of people who are listening increase. Even the smallest part of an installation that is not 'on song' will be noticed. In fact, our expectations are being fed by the technology. The whole industry has to professionalise itself, from the highest level right down to the lowliest discotheque."

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## **GOING INTERACTIVE IN UTRECHT**

Lee Baldock has a night out with Veronica



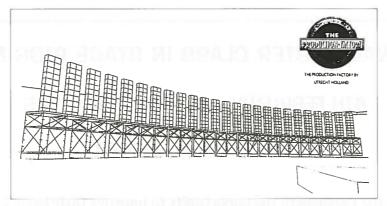
The rear of the venue, with crowds of Veronica devotees watching the 300-screen videowall, the original concept for which is shown below.

Veronica, as you may or may not know, is a Dutch television station. What's more, it is just about the most popular TV station in Holland. Popularity is a very important factor in Veronica's case, because the station hopes soon to break away from the rigid format of the state-run TV network, and become a commercial station. To do this, they need a great deal of support, and this is where the 'Mega' experiences come into the picture, and where, in December, Ghent-based Arf & Yes also came to be involved.

The televised Mega Rock and Mega Dance Experiences, which are held approximately once each per year, are a very big attraction to the youth of Holland. Veronica aims at attracting the bulk of the country's young people, and seems to be doing very well in this area. December's Mega Dance, however, to be held in the Prins van Oranjehal exhibition centre in Utrecht, had the addition of a slightly different theme to its predecessors, as the event was also to serve as the springboard into Holland of the Internet system - already an enormously popular idea in the States, but relatively new to us over here in Europe. (Even the man from IBM who was installing the Internet at the arena

knew nothing about it a year ago). Internet is an interactive digital information system which enables the PC user to access a wealth of information, in the form of text, image, sound, etc, from anywhere in the world, via the existing telephone system. There are an estimated 35 million Internet users worldwide already, and that's just the start.

One of the special features of the evening was the Dance Experience News Service (DENS)





Preparing to go Interactive. Testing the Internet equipment and the videowall continued throughout the afternoon and early evening.

which was published every half-hour on the Internet system and included updates of the evening's developments as well as E-mail messages from Internet-linked home users, who could watch live pictures from the venue on their home computer screens if they so wished.

So this was to be 'the' Interactive event. Veronica's producers wanted a show where the people were 'in control', and to achieve

this, they turned to Arf & Yes, the highly versatile design team from Ghent, Belgium (see L+SI June 1992/November 1994) whose Giovani De Schampheleire is a man to whom ideas seem to come as naturally as breathing, and so was quick to arrive at a viable solution to Veronica's request.

The prospect of creating an 'interactive' dance event, in which 24,000 people have the opportunity to influence the show in some way, is a potential headache to say the least. The mayhem that the concept seems to suggest is

enough to steer most people away from the idea, but Giovani succeeded in producing a relatively simple, markedly unchaotic and ultimately effective way of organising things.

As can be seen from the AutoCAD drawing, a curved array of 300 Barco monitors was positioned at one end of the hall, where the interactive element in the evening's proceedings was to take place. This was not a true video 'wall', however, more of a broken wall, as the stacks of monitors were spaced slightly apart, so as to cover as broad a space as possible with the limited number of screens available, without destroying the visual effect. "It's very easy to say we want this many or that many screens, but it's not so easy to get hold of them. It may

not look a lot, but actually getting 300 screens together is quite difficult," he explained.

Giovani toyed with the idea of using larger screens, but found them to be unsuitable for the event, and the 300 screens employed were eventually collected from three different countries. Despite the ever present limitations of budget, the effect of the 'stretched' videowall was not an undesirable one, and the idea of the images on screen being split apart added to the

spectacle rather than detracting from it.

The venue's 162m x 83m dimensions were cleverly 'divided', (without really appearing so), between the business of the live music on the stage at one end and the interactive videowall at the other, by a raised multi-level platform in the middle. This allowed the eager young dancers an ideal view of the proceedings, as well as giving lighting designer Ignace D'Haese a perfect perch for his lighting consoles (an Avolites QM Diamond, a Compulite Animator and a High End Systems Status Cue), six metres above ground.

In front of the array of screens was a smaller raised platform, equipped with a row of more than 20 PCs, all linked to the Internet system through a van-based nerve centre behind the scenes. This was where, Giovani hoped, members of the audience would be able to fulfil the 'interactive' aim of the event, by summoning images of their choice to appear on the screens towering above them. On hand, of course, were a team of experts to keep the images coming, and, with a combination of tuition and interruption, keep the interactors interacting.

Giovani has keen views on how the nature of large scale entertainment is rapidly changing. "For a long time the business of putting on a show was simple. Everyone played in the centre of a box, with a PA wing either side and some lights pointing down from above. Things are developing very quickly now - bands like U2 are experimenting with interactive shows and changing the way we look at performance. This is an interesting development for the future of entertainment."

Giovani is indeed excited about the prospects for interactive entertainment. He accepts that it is very much an experimental field at this stage, but in the future, when the Internet system is far more firmly established in our everyday lives, (as it inevitably will be) and constantly accelerating technology has opened up new areas for designers, then interactive entertainment in a much fuller and more effective sense will be possible. The opportunities are quite colossal. In fact, plans are underway for a combined interactive event to be staged next year, with Internet providing visual and communication links between venues. Anybody in the world with access to Internet will also be able to join in. Giovani shakes his head in mock bewilderment when contemplating this kind of advance in the entertainment industry. "We should be able one day to hold one event say, here in Utrecht, and another simultaneously in Japan, for instance, with people at each event able not only to see and communicate with people at the other, but to actually influence the form that the events are taking. That is interactive!" Why stop at two? was a question that crossed my mind, as I'm sure it has crossed Giovani's.





Two views of the VIP Interactive Plaza. Ignace's 'cyberspace' creation adds a fitting atmosphere to the introduction of Internet to Holland.

Arf & Yes' approach to the project also included some custom-made additions to the lighting effects. A row of highly polished, curved and twisted metallic mirror plates, each one unique, was hung between the stage and the central platform, and provided a striking reflective surface for Ignace's lighting. Giovani gestured briefly to them as we walked through the hall. ("We made those too.") Another previously unseen innovation was the large number of huge white 'strobe balls' that were suspended around the venue. Inside each was a Dataflash strobe, which created the effect of enormous pulsating eggs when the strobes were on.

The Mega shows are put together by the Production Factory, who are based in Utrecht, and being part owned by Flashlight, StageCo and AmpCo, are pretty well equipped to put any kind of show together. They deal mostly in one-off productions, and have worked with Frank Sinatra, Joe Cocker, Pavarotti, Liza Minnelli and Barry White, among others. Production manager Mick Froeling has known Giovani and Ignace for many years, so the team are able to work together very well, providing a complete turnkey operation for Veronica's producers.

The Production Factory's admirable motto is 'Everything in one hand' - and they have big hands. Using AutoCAD, all the specifications for a production are decided, set and presented on one plan, which everybody works from. Mick likened the process to architecture: "It's like a building - when an architect designs it, everything is laid down, all the information needed. There's no room for doubt or argument - you design the building and build it. Nobody says we need a heavier cable here, or asks what has to be done there - it's all decided before we start. If it doesn't stick together in the computer, we can't build it here at the venue." Mick and co-manager Gerrit Kuster appreciate the skill with which Arf & Yes put the project design together. Mick's conclusive description of Giovani and Ignace as 'crazy' is said with admiration, and as we met whilst





The impressive Prins van Oranjehal exhibition centre in Utrecht.

photographing Ignace's lighting creation for the VIP Interactive Plaza, his enthusiasm for Ignace's work was again evident.

This was a much smaller venue, where a select group of Holland's business persons were to witness the formal introduction of Internet to Holland. To create that special gravitas fitting to such an event, Ignace had turned the VIP area into 'cyberspace', with 20W laser sprays at floor and ceiling level framing a large projection screen, onto which was

projection screen, onto which was projected Internet in operation. A random series of images and pieces of information were being called up by an eight inch mouse pointer in front of a captive audience whose ankles were glowing laser-green. On either side, a series of black-curtained demonstration booths gave those present a chance to participate in the Internet experience. These booths were framed above with four and six-bar Par 64s, which gave a warm violet tint that contrasted effectively with the eye-catching green of the lasers. Behind the bar where friendly staff were dishing out free wine and beer, a row of 20 pale



The Production Factory's Mick Froeling, production manager of the Mega events.

pinspots and two oil crackers completed the weighty atmosphere of Ignace's cyberspace.

Looking around the main dance venue in the cold light of day, it seemed that there were a mere spattering of lights installed. The vast roof

"Even as I left the venue at 1am, Dutch radio was reporting that people were being robbed of their tickets outside . . ."

appeared sparsely dotted with occasional pieces of hardware. This illusion quickly disappeared with a little walking and counting. One neck-craning circuit of the arena revealed 24 Cyberlights and 24 Super Scans, which between them later covered the entire dance area, and the 24,000 heads that were bobbing there. Also to be found were 36 Dataflash strobes, 10 Arena Visions with shutters and scrollers, a dozen Molefay 8-Lights with scrollers, six Intellabeams, and around 20 fresnels. The main stage area itself was covered by 44 cyc lights, 40 Par 36s, more Arena



Flashlight, part owners of the Production Factory, supplied the lighting equipment.

Visions (used to blindingly good effect) and further Par 64s and fresnels. Not surprisingly, Ignace had been busy for the whole of the previous night.

race had been busy for the whole of the revious night.

The event was a great success, despite a few very stressful minutes backstage at

11.55pm when a power failure threatened to mess up the midnight high point of the stage show. Giovani looked a worn man by the time this little hiccup was overcome, but he's used to dealing with such problems. The Arf & esign will do nothing to harm the

Yes design will do nothing to harm the popularity of the mega events in Holland, where demand for tickets is enormous. Even as I left the venue at 1am, Dutch radio was reporting that people were being robbed of their tickets outside the hall - I never thought I could hide a backstage pass so quickly!

While we all hope that future developments in entertainment do not increase the crime rate, the thought of what Giovani and Ignace will be creating in years to come when interactive entertainment comes of age is no less than fascinating.

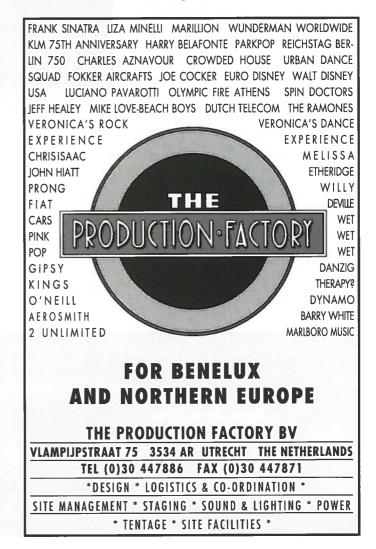


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# **ALL HANDS ON DECK**

Rene Froger is one of the leading performers on the European continent.

Peter Vos (sound) and Rinus Bakker (staging and lighting)

chart the extraordinary preparations for his Rotterdam Shows

At the start of November, Dutch male vocalist Rene Froger performed the first of 10 shows at the Ahoy Stadium in Rotterdam a new record. Though his reputation doesn't extend far beyond the Netherlands (and Belgium), in those countries he is probably the most popular performer of the moment. To give you an idea of just how popular Froger is, his last album was released in November, and went Gold within two weeks - an achievement matching that of his better known contemporaries including Nirvana, Bon Jovi, The Eagles and Joe Cocker. His previous album went Platinum three times over (300,000 sold) which is comparable to the record sales of Wet Wet Wet, Mariah Carey (5x) and Pink Floyd. No other artiste (local or foreign) has ever achieved 10 consecutive shows at the Ahov - even Tina Turner only managed six.

Because these shows were the grand finale to his national tour, Froger wanted the largest and most spectacular stage and lighting set, as well as the most extensive sound system available ('Vegas'-style). It was a luxury he could well afford, as all the shows had been sold-out in the early months of 1993. He could therefore budget and plan accordingly, and the production team could pull out all the stops. The budget also allowed one final 'first' - the world debut of the PA speakers.

#### SOUND

The Ahoy is, unfortunately, Holland's largest indoor concert arena. I say 'unfortunately' because it is really a sports arena meant for indoor cycling and athletics events, so the acoustics are somewhat iffy. For good sound quality, it requires a lot of care and

feeding of the sound system. Handled poorly this can create 'pools' of sound, with only a few people benefiting, leaving the rest wishing they'd saved their money and stayed at home. Well aware that this problem has beset other performers at the venue, Froger was adamant that each and every fan should be able to hear clearly. The maximum capacity for a concert at the Ahoy is 10,500 standing and around 8,000 when fully seated. In order to create the best possible environment for the fans, the seating was placed on a steep rake so each person would have an unrestricted view of the stage. The ticket limit per show was thus set at 7,050.

Froger's performance blends a mixture of styles, ranging from ballads to rock songs and therefore needs a powerful system. On top of this,



The Ahoy stadium ready for action, complete with an army of moving lights and effects lighting, and the new Renkus-Heinz CE-3 speakers in the four main left/right clusters.

photo: Rob Verhorst



The sound system set-up with a Yamaha PM4000 and Midas XL2 providing the main FOH control.

the large backing band can really groove at times, so it was vital that the sound system could generate sufficient SPL - even to the most distant seats. In the Ahoy this meant a huge main sound system, plus several delay side and rear fills and a set for surround sound effects.

The first problem to be surmounted was that a 'huge' main system would obstruct much of the spectator's view of the stage. A second was caused by the very extensive lighting system as the trusses couldn't handle much extra weight, and the third was that Froger didn't want columns of 'large square boxes' hanging over the stage and ruining the design. This posed a problem for system designer/FOH engineer Dick Scheepbouwer because it ruled out systems like F2, Clair, EAW, etc. But Ampco

Pro Rent, the rental company supplying the house system, had only just received models of the newest Renkus-Heinz speakers - the CE-3 series with CoEntrant Waveguide.

This design is unique in the way it combines compression drivers and cone drivers in one single horn throat. Moreover, it uses multiple drivers for different frequency bands on one horn. The design is such that the soundpath from each separate driver to the horn mouth is exactly equal. This creates a signal-aligned and coherent soundwave, the dispersion of which can be tightly controlled. The big advantage is that far more power originates from a small area, so for a specified SPL less boxes can be used.

The other big plus is that sound from the different sources (HF and MF) has the same apparent apex, or sound origin. This greatly reduces inter-driver interference, and all its inherent problems, in the listening zone. Thanks to the well-controlled horn dispersion, the damaging inter-speaker interference in multi-cabinet clusters can be minimised by careful aiming of the separate cabinets to prevent overlapping. In addition, the compact size (meaning less transport and handling costs) and ease of rigging became important factors. These practical advantages led Ampco Pro Rent to offer these new TSC cabinets for PA rental jobs, both large or small.

The main advantages of the CE-3 are its very high SPL-to-weight ratio, well-controlled narrow sound dispersion and very compact dimensions. The dedicated signal processor

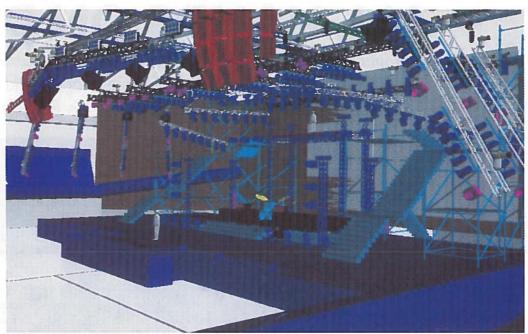
ensures maximum clean output without the worries of damaged drivers and/or distortion. So the CE-3T mid/high and low seemed perfect for the four main left/right clusters, the C-3 Sub for sub bass and the full range CE-3T for the downfills (under main clusters) and two sidefills for the audience close to the stage on the two seating rings.

The four delay fills in the hall each used two Renkus Heinz C-1 mid/high and one low. The three separate sound effects clusters (one backstage and two at the back of the hall) each consisted of eight Turbosound TMS-3s. Under the stage rim, 16 small full-range near field systems were placed for the first row of seats. A totally separate cluster of eight R-H SR-2s hung right over the middle of the hall (just like the PA system in a basketball hall) and was only used for pre-show announcements. All in all, some 14 different loudspeaker groups had to be controlled.

An intricate system like this must be properly installed and aligned, or it creates more problems than it solves. This alignment was carried out by US consultant A. Yuill-Thorn using his own FFT-based procedure (comparable to the SIM and Correqt methods). The drum kit formed the reference point for the signal alignment of all the speaker clusters, the main clusters for the equalising. After much measuring, and even more listening and tweaking, a final sound for each zone was obtained that fitted Scheepbouwer's specifications. He remarked later that he was surprised that the system worked as well as it did - especially considering there had been no previous experience with the new R-H CE-3 speakers in a configuration of this size.

The care taken over component choice and installation paid off. When walking through the rows of seats on the floor and the side rings the sound remained balanced: there were no noticable 'gaps' or 'hot spots'. In addition, the overlap between main and delay speakers was nearly undetectable, although the C-1 are different speakers. The seats on the top ring particularly enjoyed a really good sound. The main system sounded more like a big studio monitor than a PA! The system could pump out some high levels: SPLs averaged around 105-108 dB at the mixing desk. The surround sound clusters really shook 'em up - in the opening number they underscored Froger's arrival by 'helicopter': sound levels peaked into the upper 110 dBs and the separate subwoofers 'moved the earth'.

A professional attitude, a matching professional budget for high quality equipment and people, plus scrupulous attention to detail is the only way to produce the best results. These shows pose intricate sound problems, and cutting corners always backfires - the victims being the fans. Any self-respecting performer should be unable to live with the fact that he or she has short-changed fans just to



CAD generated 'virtual reality' image of the set, trussing, lighting and sound ensemble.









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14 trailers of equipment were unloaded and assembled in just 36 hours.

save a little money somewhere. Alas, they mostly still do - this production being one of the few positive exceptions.

P.V.

#### LIGHTING

The set up for the concert was an incredible rush. The lighting and rigging team had only 36 hours between entering the hall, which was even then still being cleared, and the beginning of the rehearsals. Everything had to be completed in this time, including the building of arena bleachers and VIP booths. Three companies were involved in the set design with mainstage, hydraulics and towers supplied by Stageco Holland, motorised stagelifts and trussing from Flashlight Rigging and showsteps and rolling towers from NOB.

Because of the technical complexity of the set, the decision was taken to pre-build the entire rig in Flashlight's Central Studios in nearby Utrecht, and during this time, the crew worked hard to ensure that the huge set, with its various horizontally and vertically moving components, could be put into action in the Ahoy within 10 hours. Meanwhile, lighting designer Gerard Maijenburg was using AutoCAD and PowerCAD, from Flashlight's CAD department, in his design preparation for the lighting rig. A series of 2D CAD drawings were then created by Michiel van der Zijde and myself, and these details were then fed into Flashlight's own 3D file of the Ahoy.

It was decided that the rigging plot would serve as the datum line for all the plots. Based upon this, pointloads were established, and a CAD rigging application calculated the stresses in the wire ropes and loading of the beams. The advantages of CAD made themselves felt fully when other contractors required answers to their technical questions. On shows of this scale, such preparation is inevitable. Despite that, there were still many last minute changes to the overall design, and in response to this Dutch company Production Design were brought in to act as technical co-ordinators to ensure that all interests were correctly catered for.

The rigging itself was quite a feat, with the stage plan covering an area of 50m x 22m. A total of 146 chain hoists were used in all, with a combined suspended weight of 40,000kg. Maijenburg had set himself the task of creating a high energy atmosphere in the hall, and had also to bear in mind that Froger's performance was to be filmed for video. His lighting consisted of no less than 146 automated lights, in addition to just under 300 Par 64s, 40 5kW fresnels, four Super Troupers, two Gladiator followspots, 10 8-Lites and six Arena lights, controlled through two Avolites Diamond consoles. The automated lights were a mixture of Vari-Lite VL5s (36) and VL2s (80), these being controlled by Vari-Lite's Artisan operator, Rob Beertens.

There were also 24 Cyberlights and six Clay Paky Super Scans, run through a Compulite Animator desk. Because the concert was to be filmed, Wybron's award-winning Autopilot system was added to the equation. This was only its second outing on a major tour, the system having been first used with ZZ Top. The decision paid off and the tracking system worked well with the Super Scans trained on Rene's hidden transmitters, which signalled his position 30 times per second to the six receivers in the rig.

The spotlights needed to have a long throw capability and Strong Gladiators were chosen, while the four Super Troupers were positioned out over the balconies. In addition to the battery of lighting effects, five lasers supplied by Resal provided some of the stunning opening sequences on the large scrim and mirrorball. The complexity of the lighting rig for the Ahov show meant that Maijenburg had to assume a different responsibility to that which he had been used to during the previous theatre tour. Now, instead of actually taking control of the lighting consoles himself, he sat back in a supervisory capacity running a watchful eye over a team of experienced operators. As the reaction to the show, and the video tape of the event, and the photographs accompanying this article clearly demonstrate, the lighting was very successful. R.B.

# **SECOND TAKE**

#### John Watt's view from beside the camera

• Late hire requests are inevitable, but any TV lighting designer worth his salt will have a desk full of hire company catalogues listing everything his heart can desire - from sash cord to moving lights, and from red-heads to Super Troupers. But, don't be fooled, dear reader! These lights are pure fiction. Don't cling to an image of shelves full of profile spots awaiting your call - a shelf full of catalogues maybe,

but the lights don't actually exist. They are an abstract idea like a quick drink or an early night, and not founded in reality at all.

Yes, I do have an axe to grind. My current job uses around 60 profiles of one sort or another and the emergence of the 2.5k models opens up the possibility of lighting Bob Monkhouse with maybe a point or two left on the

dimmer to try and avoid the embarrassing tallescope lamp changes in the middle of recording as half the rig is over the raked audience. My faithful gaffer is always reluctant to do these lamp changes with an audience in, as the warm-up man greets this welcome diversion as manna from heaven and gives a running commentary as Dave climbs the tallescope to thunderous applause and the usual bit about 'and now he will leap 40 feet into a wet sponge'.

But I digress. Having found a hire company who 'have plenty of Altos' I quiz them: "20 8/16 and 20 14/32's?" 'No problem' was the reply, so we place an order. Suddenly things change. Faced with an actual order the dear old hire company can do four of one and eight of the other. The rig is two days away (Saturday and Sunday in between) so we reluctantly have to settle for a rag-bag of types. And they were the only outfit amongst the half-dozen hire companies who even claimed to have what I wanted. However, I console myself that Bob's key at least be man enough to cope with his summerin-Barbados tan now that I have a few Altos to play with.

The lamps arrive and are rigged, so now we can relax a bit. Wrong! Do you open up all your hire order and check the bulb wattage? Oh well! On the focus, my meter says those Altos aren't much brighter than the 2ks we used last time. Stick a new lamp in and try again. Dave tells me they've sent us 2ks as spares. Odd! We investigate and find they are all 2ks and they hadn't even mentioned it. Destroys your faith in human nature, doesn't it?

• It transpires that CP91s are suffering a world shortage and some makes are persona non grata in this particular unit. Nevertheless it's me that has to make the calls and, believe it or not, Strand have got a store full of the things. What's more Joe Fowler and Clive Salmon at GE are prepared not only to raid their production line, but also drive the lamps in person from Leicester - so my faith in human nature is restored!

Having assembled the kit for this show (Celebrity Squares) is only half the battle. The designer Richard Plumb, not known for giving lighting designers a quiet life, has designed a set which features not one, but five cars, and these are displayed on five shelves - all on different levels - and roofed in by a huge ceiling piece.

This arrangement neatly negates all the usual TV grid facilities as the hoists cannot come in past the header and the tallescope and genie cannot get under the lamps because of the cars. So we use a small electric cherry-picker which like all its breed defies the rules of gravity by reaching out some eight metres away from its base at a height of between eight and 10 metres. It's not a big reach compared with the lorry-mounted jobs we are all used to, but impressive enough when you are up in the basket and looking down the arm at an impossibly small dolly. OK, it does weigh four tons - as demonstrated by the state of the vinyl floor - but it feels a lot less stable than it actually is!

We have now found one with a subtle enough control to allow us to go in close to those gleaming motors without too many heart-stopping moments. So, having got up there it is simple enough to set all those profiles, isn't it? Well no, but! had better not start commenting on the crude mechanics of profile spots. Maybe! make demands on them that they were never designed for. Perhaps another

time I will sound off about ventilation and smoke - another pair of unhappy bedfellows.

• Impending live performances, whether for theatre or concert, concentrate the mind wonderfully, don't they? An instinct for self-preservation and the need to stay on budget lead to meticulous planning and rehearsal. However, the march of technology in television has had the reverse effect: live performance is a rarity. Incidentally, the use of the word reaches its contradictory best in the 'intros' to some American shows which say 'recorded live' in Hollywood. Long ago, with the introduction of the ability to record, TV directors were robbed of that number one creative impulse - i.e. panic - as a deadline approached. Result - decisions

can be made later, even after the

recording.

This malaise affects the whole team, since the director hasn't briefed himself and it is uncomfortable and chilly for the lighting designer. Most of the other technology-based crafts have mobile and lightweight equipment which is highly adaptable as production proceeds. The average

TV lighting unit clamped to a pipe hoist or monopole is cumbersome to focus, often impossible to relocate and usually quite inaccessible. On top of that there may be several hundred units to shuffle.

The average lighting plot resulting from this scenario ('I may shoot it from here . . . maybe from there . . .') is arrived at by guesswork and cunning and represents, like marriage, a triumph of hope over experience. A belt and braces approach is necessary - so are heavy rigs and the consequent hire bills which are the order of the day.

Friends tell me this is the raison d'être for the infamous, award-winning double-ender universal fitting (not to be graced with the name luminaire) which if allied to a saturated grid system ensures that wherever the need arises there is just the lamp you don't want not far away!



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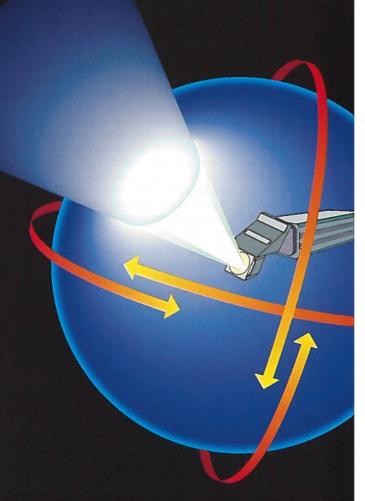
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#### **ASLEEP IN THE STALLS**

We tend to concentrate on the spectacular in L+SI, so for once let's take a look at a couple of innovative little shows making the most of tiny technical budgets in equally tiny spaces. In their own way, Tony Kushner's **Slavs!** at Hampstead and Gil Vicente's **The Boat Plays** at the Gate in Notting Hill are as spectacular as anything the big theatres can offer - with the added frisson of having the actors working practically in your lap.

Snow is falling when you enter Hampstead Theatre for Tony Kushner's cartoon history of the rise and fall of *perestroika* in Russia, from three snow machines at the forestage, which deposit it into a clear perspex trough which runs the width of the opening. The Red Army choir are crackling out from an old speaker stage right, festooned with a few tacky Christmas lights. Around the bare-ish black stage is the oddest assemblage of lighting gear you could hope to find - a typical post-Communist lash-up on a five-dollar ( = five zillion rouble) budget, you might think. When I described it as such to lighting designer Alan Burrett I was very relieved to find him in agreement, since this was just the effect he and set designer Ultz were trying to achieve.

There's hardly a single proper stage lantern in the rig, apart from a Svoboda light curtain of M16s stage right and some Parcans stage left:

even these latter are not pointing directly at the stage, but reflect off some film-studio reject Lee diffusion mirrors when in use. The play's scenes, indoor and outdoor, range from the Kremlin to Siberia. It's a splendidly ambitious play, and Burrett's lash-up supports it with some splendid effects. Ultz didn't want lots of lanterns over the stage; he wanted a neutral space, hence the mixture of odds and sods almost casually strewn around. A couple of sodium floods taken from street lamps (from Kensington Council via the Royal Court) just sit against the stage walls. A large gilt picture frame (containing nothing but a Red Square - geddit?) which comes down to suggest a Kremlin interior has its own gallery-lamps attached. A metal halide

flood, producing a blue like that which illuminates the facade of Waterloo Station, is hung next to a cluster of eight M16 birdies, the one to give a big blue wash for the snow scenes, the other to focus tightly on a table for an intimate interior. The snow trough is lit by M16s again - there are four battens of them. Other backlight comes from a handful of neon tubes, one of them dropped casually to light a doctor's surgery scene.

This use of non-stage lighting is almost an Alan Burrett trademark - he used sodium and mercury streetlamps in *Three Sisters* back in 1990 at

the Royal Court (from whence the sodiums were salvaged for *Slavs*), and got an Olivier nomination for it. It brings its own particular problems - the halide, for example, takes about three minutes to warm up and has to be carefully cued!

In support of this, Ultz has the show's one luxury, a revolve. Very

basic flats swing out from the side walls to suggest an office or the surgery; a couple of doors are simply held by the stage staff (who got their own curtain call) when necessary. With such economy of design and ingenuity of light a series of most evocative, very Russian scenes are created in perfect support of a fascinating play. Kushner, whose concern for gay rights is well known from his *Angels in America*, is also a committed Marxist, even more of a rarity in the US than in Britain, and his concern in *Slavs!* is the simple but awe-inducing question posed by Lenin: what is to be done?

It's a question that loses none of its urgency from the collapse of the Soviet Union, and Kushner dramatises the attempts, tragic and farcically comic, of various Russians to solve it. He paints his red canvas as boldly as anything in *Angels*. The plays are directly linked - the speech from "the oldest living Bolshevik" which analyses the Marxist dilemma after *perestroika* appears in both.

More astonishing design in a small space for *The Boat Plays*, the sixteenth century Portuguese classics seen for the first time in Britain at the tiny Gate in Notting Hill. Of course, the Gate's not so tiny since its refurbishment, but for this show Angela Davies has built all over the theatre: the audience sits on rough rickety benches, covered with blankets (the benches, not the audience - it gets quite warm enough with a full house and a lot of lanterns going). The side walls are covered with sailcloth



Back to basics for Tony Kushner's Slavs! at Hampstead Theatre, above, and Gil Vincente's The Boat Plays at the Gate in Notting Hill, below.

"David Johnston's gutsy translation keeps it

harshly contemporary - I wonder what

the original Portuguese line was that comes

- the impression, not unreasonably, is that of being on a boat.

For we are indeed on a boat, the boat to Hell, whose prow juts out before us stage left, with room for the other miscreants selected by the devil in the first play to join us. Stage right, rather higher out of the water and a lot more difficult to board, is the boat to Heaven, its deck paced by a ragged, rather Wim Wenders angel. The entrance stairs for the audience have to double as an entrance and waiting area for those unfortunates who are destined to hang around for a few aeons in Purgatory. Yes, folks, we're in the wonderful world of the morality play, but in David Farr's production it's no mere historical

excavation - David Johnston's gutsy translation keeps it harshly contemporary - I wonder what the original Portuguese line was that comes out as "Well, bugger me with a fish-fork"?

Angela Davies, another former Linbury Prize winner, has created an amazing atmosphere to support the production, which strains the always stretched technical resources of the Gate to the full. There are masks supervised by Trestle's John Wright, and just enough music from David Knotts. Some 21 named costume makers and eight prop makers get

credits. The lighting designer was Paul Russell from the Bush, where the production team has worked before - quite a useful link, for Paul was able to scrounge some of the show's 94 lanterns from his home base. Even with this relatively high number of lanterns for a Fringe show, the intervals were frantic

base. Even with this relatively high number of lanterns for a Fringe show, the intervals were frantic times of gel-changing and repatching. "We needed three quite separate

David Farr's absorbing production.

looks for the three plays," explained Paul.

The compact birdies that played their part in *Slavs!* came in useful at the Gate, too - 14 of them. The 'purgatory' walkway presented special problems, since most forms of lighting it properly got in the way of sightlines or banged the heads of unwary members of the audience. The eventual solution was some 800W minispots found in the Gate's meagre supply. The grand finale, which features some decidedly undeserving members of the European power elite entering Heaven, required a blaze of Parcans, and again finding somewhere to hang these without cluttering the set or the Gate's low ceiling was not easy. A compliment to Paul's rig is that I had to ask him where he'd put everything, since the lighting was one of the last things I noticed in

This kind of scrimp and scrounge work is going on in small theatre spaces all over Britain, indeed around the world, but it can make the best training, and even experienced designers don't turn up their noses at such a challenge, which can provide important lessons for larger-scale work. After *Slavs!*, lighting designer Alan Burrett flew straight to Denmark to discuss work on two rather differently budgeted productions - *Jesus Christ Superstar* and *Tannhaüser*.

Ian Herbert

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### MAKING SPACE IN MANCHESTER

Ian Herbert Heads North to Learn More about the Art of Theatre Design

I wish I'd had a week to spend in Upper Campfield Market, where Theatre Design Umbrella presented their exhibition Make Space! in November as one of the last events in Manchester's year as City of Drama. The airy cast-iron hall, one of the year's planning gains, housed an interactive treasure trove of models, costumes, drawings, photographs, lighting plots and the most enticing theatrical design bric-a-brac you could hope to find. In the centre of the hall was the Royal Exchange's touring mobile theatre-used throughout for demonstrations, discussions and performances - while around it radiated the exhibits, arranged according to performance space: a profusion of light, movement and rich, rich colour.

The show very nearly didn't happen at all. Only a month before opening there wasn't nearly enough of the budgeted £85,000 in place, but somehow enough was found to go ahead; organisers Kate Burnett and Peter Ruthven Hall worked their socks off, aided by technical director Ken Coker, education officer

Becky Chapman and a small army of designers and assistants who finally arrived to set up the exhibits. One mustn't forget also that Imagination Entertainments stepped in with some much needed sponsorship.

The last comparable show was at Riverside Studios in 1987, like this one a basis for selection for the coming Prague Quadriennale. That was very much a village-hall affair, reflected in the serviceable, but hardly elegant catalogue, British Theatre Design '83-87, which had to function, until the arrival of John Goodwin's excellent survey, as a guide to one of the most productive periods in our design history.

This year's exhibition, although produced under the same appalling financial conditions, was much more professional. I'd urge anyone with the slightest interest in sets, lighting and costumes, let alone theatre architecture, to invest immediately in the show's superb catalogue, which makes a fine reference on its own. It doesn't really reflect the exhibition, because it's inevitably restricted to twodimensional means: production photographs, costume drawings and storyboards, almost all in colour. But it does have helpful commentary beside each illustration from the designers, including a healthy sprinkling of lighting folk, and a set of career biographies - 134 of them compared to the 100 in 1978.



Marsha Roddy's work for children's theatre included this chair from *The Three Secrets of Serendip* for Quicksilver.

What you got in the show itself was a chance to touch, feel, even get inside an astonishing range of 3D exhibits, and experience the sense of performance space which was the organisers' prime aim. Seven sections were split up according to the nature of the space, so that although you might have to track down one designer's work scattered around the hall, you could, on the other hand, assess in one spot the collective design output of those theatres that made special efforts to support a display. Each section usually had one or two architectural models also, to provide a sense of the space in which designers were working. These ranged from Chris Richardson's refurbishment of the Young Vic through Tim Foster's doubling of the Gate's space to the proposals for a new in-the-round theatre in Scarborough's Odeon and a couple of big RHWL projects, Manchester's Halle Concert Hall and a new Cameron Mackintosh musical theatre for Duisberg in Germany.

The first three sections (theatre-in-the-round, black boxes and adaptable theatres, thrust and open stages) have a certain overlap in their design intentions. One could conceive of a thrust production in the Royal Exchange, for instance, and Jan Bee Brown's supermarket warehouse design for *The End of the Food Chain* at the Stephen Joseph seemed to be coming close to a

three-sided space. In contrast, we were able to see the Bolton Octagon as a traverse stage, for *Derby Day*.

I've seen the new Gate, Notting Hill, used for traverse and thrust, but the design we were offered was Richard Hudson's skewed box for their first show, an end-stage version of Valle Inclan's Bohemian Lights. But what an end-stage! As Ace McCarron explained: "Richard Hudson's set proposals had been described as almost completely light-proof. The entire lighting budget was reallocated to the wardrobe department. The wake scene had 18 actors blocked into a space 3m by 1.5m with two folding chairs and a coffin. Half the Fresnels and Parcans had disappeared during the building work. However, the new air-conditioning worked perfectly, nobody was seriously injured and the lighting was nominated for a London Fringe Award."

Two other small-stage designs stood out especially in the black box section. Francis O'Connor's night club set for a play at Dublin's Peacock featured some very striking red-topped bar-stools over a

reflecting, metallic stage: with the play's climactic murder the stool-tops appear to hang in the air like drops of blood. With Ian Westbrook's design for *Brighton Rock* at Lowestoft's tiny Seagull theatre we were asked to contemplate the idea of a cast of 30 plus a seven-piece on stage band occupying a stage area seven metres square and going through ten scene changes. Make space, indeed.

The thrust-stage section was dominated by a very strong showing from Pitlochry, who had sponsored ample space to show the talents of their resident designers - and their work was shown to considerable advantage. Here, too, we were able to consider the challenge of moving from one type of stage space to another: models of Kendra Ullyart's Swan, Stratford staging of *The Beggar's Opera* and Ultz's *Thebans* were set alongside their Barbican counterparts, and you could almost predict that where the one would lose in transition to a more impersonal space, the other would gain in gravitas.

The majority of exhibits, not surprisingly, were in the Proscenium theatres section. Yet one of the excitements here was to see designers breaking our fixed idea of separation from an end-stage. Mark Thompson's celebrated set for Wesker's *The Kitchen* at the Royal Court built over the stalls and offered a



Richard Hudson's design for Bohemian Lights at the Gate Theatre, Notting Hill.



The striking club design of Francis O' Connor for Silverlands.



The Atheist's Tragedy at Birmingham Rep with set design by Ruari Murchison.



Kendra Ullyart's corner featured designs for the Royal Shakespeare Company's Beggar's Opera.



The Royal Exchanges Mobile Theatre was in constant use.

traverse staging - almost in the round. Paul Farnsworth subverted most of the Piccadilly Theatre auditorium for Cameron Mackintosh's ill-fated (but visually terrific) *Moby Dick*, and Patrick Connellan brought huge banners out over the Birmingham Rep's auditorium in an attempt to lure the audience into *The Atheist's Tragedy*.

Design at Birmingham has been very hot over the last few years, and it was exciting to see a retrospective of the work done there by Connellan, Ruari Murchison, Robert Jones, Fran Thompson and Kate Burnett, all the way through to Kate Owen's designs for the Orton double bill which opened at the same time as the exhibition itself. Lighting got its due in the Birmingham exhibits, too - here's Kate Burnett on Of Mice and Men: "Nature and the time of day were formalised into three oblong shapes (one of which was the cyclorama) and a multi-coloured floor. Combinations of specified colours on the screens conjured up the essence of sunset on the riverbank, cornfields at midday and the huge night sky. Jenny Cane's lighting used the colours in the floor to answer those on the screens, emphasising the locations and times and yet also focusing on the actors in each environment."

The proscenium section, of course, contained a lot of work from the big names: Bill Dudley (Vixen) and Alison Chitty (Gawain) at Covent Garden (alas, rather perfunctorily); John Napier's Hollywood rococo mansion for *Sunset Boulevard* (alas, only in photographs); Hugh Durrant's splendidly extravagant costumes for *Copacabana* (alas, without a parallel show of Imagination Entertainment's scenic slides); a fascinating Bob Crowley story-board for *Carousel* (alas, without a video clip to show the incredible progression he achieved in the overture).

But, as in other sections, there was work from smaller theatres of lesser-known designers that impressed by its presentation. For instance, a series of lit models from designer Nettie Edwards and her lighting man partner Michael Hall from the Cheltenham Everyman which were quite thrillingly unconventional, making me revise immediately the prejudgements I'd always made about what I'd always assumed to be a ploddingly comfortable repertory house. (The show was a very good way of breaking down the pat ideas you can develop about particular designers, too: Saul Radomsky, whom I think of as a meticulously elegant purveyor of art deco and filigree work, was showing a slobbery plastic-formed jungle set, for Savages at West Yorkshire, that took



Practical workshops were a feature of the event.

your breath away with its rough vitality.)

The touring section demonstrated some of the problems of adapting a show to spaces that may vary wildly in size and sightlines. Rae Smith's set for Complicite's *Street of Crocodiles* (also featuring some delightful, Giles-like costume drawings) and Tim Hatley's for their *Lucie Cabrol* taught a lot about adapting from rehearsal-built environments to the demands of the road. And here was the ultimate example of minimalist theatre design - Nick Ormerod's set model for Cheek by Jowl's touring *As You Like It*: it featured a blank white cyclorama and a

square wooden floor, nothing more. Ormerod has certainly 'made space'. Almost as simple, but even more striking was Ian Sommerville's plain floor and gashed ceiling for an Opera North schools tour. His photographs showed what dramatic changes can be made to such a simple space with powerful washes of light.

The final two sections, on converted spaces and open-air events, gave real scope to designers to show what they can do when less confined. Vicki Mortimer's *Turn of the Screw* for Glasgow's Tramway was like an expansion of her claustrophobic *Ghosts* in the Barbican Pit, while Peter Ruthven Hall showed just how

much can be achieved by the slide-changing expertise of the Imagination Entertainments team with examples from *Tutankhamen*, a musical tried out in their own amazing atrium. Louise Ann Wilson showed some spooky work for a production given in a park tunnel in Nottingham, while on the economically practical side Francis O'Connor showed the latest in box sets: a workable galleon for *Pirates of Penzance* in Saltburn's Valley Gardens that packed, nightly, into its own jumbo tea-chest. Exhibition visitors had the benefit, too, of some late entries that didn't make the catalogue, notably Tom Cairns and Lez Brotherston, both



Tanya McCallin's model of her sheet iron set for this year's Regents Park Hamlet can be seen in the left foreground and Francis O'Connor's box set for the Pirates of Penzance in Valley Gardens. Saltburn is to the right.



Stefanos Lazaridis showed his set for the Arena Opera production of Carmen, amongst other samples of his design.



Triadic showed masks for an open-air production in Shrewsbury of Aeschylus 's Persians.

hot off the stage, and some biggies from Stefanos Lazaridis - a huge outdoor Nabucco and Flying Dutchman for the lake festival of Bregenz, and what I think was the solitary rock-show exhibit, a suitably over-the-top display for Duran Duran's US tour.

The selectors going through for a PQ exhibit will have been spoilt for choice. They could choose former winners like David Short, whose meticulous costume sketches still stand out; concentrate, as last time, on the hi-tech jokey opera school, who continue to turn out vital and exciting work; or go for an anthology of Linbury Award finalists, for several of these former student design champs (Tim Hatley, Patrick Connellan) have made good in the big world and 1993's Lousie Ann Wilson looks like joining them.

What is most heartening is that a display simply devoted to the work done year round at our regional reps would make an excellent ambassador for our stage design, as good as any of the more prestigious or more heavily budgeted work on show. What would make a fascinating entry in itself is Paul Kondras and Ashley Shairp's steel-box installation, containing a mock-up of a designer's studio not unlike those used in a celebrated USA exhibit at a previous PQ, with a video as its centrepiece on which the two "discuss space, physical and metaphysical, in the style of Joseph Wright of Derby and Ron O'Donnell of Glasgow." Nice

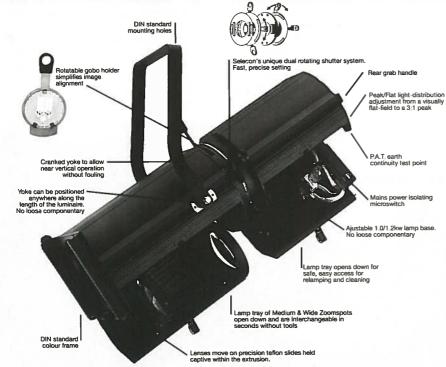
bit of welding, Paul!

Apart from going on to Prague in some form, there's a chance that Make Space itself, or quite a lot of it, will be seen again too. Kate Burnett is looking for spaces to accommodate a scaled-down version, but not just any old theatre fover will do - she wants to retain as much of the educational, interactive nature of the show as possible. We should wish her luck, and meanwhile rush out to buy the catalogue.

Alternatively, you can send a cheque for £16.50 + £1.50 postage to Theatre Design Umbrella, 19 Meade Grove, Longsight, Manchester M13 0SG cheques payable to SBTD.

The photographs of the Make Space exhibit were taken by David Marsden.

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# EQUIPMENT NEWS

#### **Next Crest Century**



Crest Consoles, a division of Crest Audio Inc, recently launched its new additions to the Century Series console line.

Significant features of the Century Vx (pictured above) include eight VCA groups, eight audio groups, four mute groups, a meter bridge with up to 21 VU meters, eight matrix outputs as standard, and true LCR (left-centre-right) panning. All channels feature eight discrete aux sends, each with on/off control, globally switched pre or post. Also included is a front panel 'insert on' switch, separate insert send and return jacks, and a tunable hi-pass filter with a separate in/out switch. A four band sweep EQ is provided with switchable Q on the two mid frequencies and switchable peak/shelf on the high and low bands.

The Century GTx console's notable features include a meter bridge with up to 21 VU meters, two matrix outputs as standard, LCR panning, plus expansion of the Aux system to include eight discrete Aux Sends with switchable pre or post. A four band sweep EQ is provided with switchable Q on the two mid frequencies and switchable peak/shelf on the high and low bands.

For further information contact Crest Audio in New Jersey, telephone +1 (201) 909 8700.

#### kl Console from Soundcraft



Soundcraft have introduced their latest 4-bus console, the k1. Designed for multi-purpose sound reinforcement work, the k1 is available in 8, 16 and 24 input frames with two stereo inputs as standard. Modular in blocks of four inputs, the mono sections may be replaced with stereo channels for line level sources. Six auxiliary sends (pre/post switched), Soundcraft's unique wide-range low noise input amp and four-band 'mid-sweep' EQ complete the package.

The UK launch of the k1 was held at the new Camden Palace in London in early December last year.

For further details contact Soundcraft in Potters Bar on (01707) 665000.

#### GS Technology from Allen & Heath

The new Allen & Heath GS console was seen for the first time at the London Music Show. Specifically designed for the British market, the GS1 prototype was shipped directly from the factory for its first unveiling.

Utilising Saber technology, the GS1 uses high quality components with particular attention to styling detail and sonic quality. The flexible GS1 is ideal for digital quality home recording, sub-mixing or live use and is, according to the company, the first console featuring eight busses for under a £1000.

The GS1 is a true in-line 16/8/16 or 32/2 configurable desktop console. The desk has all the features needed to complete the quality home recording set-up including eight main mono mic (XLR)/line input channels with phantom power, insert points and three band EQ with a sweepable mid-frequency control, four main stereo line input channels with two band fixed frequency EQ, eight additional mono line input channels (tape returns) and four stereo effects returns with balance and level controls.

In addition, the GS1 has MIDI muting and six function keys with three possible modes of operation: Patchmode, MMC and Midilearn. Patchmode enables the operator to save mute patches in the in-built memory and recall them at any time including under sequencer control. MMC mode generates MIDI Machine Commands which enables the control of MMC compatible tape machines directly from the desk. Midilearn enables the function keys to be customised to specific MIDI commands enabling transport control of sequencers, triggering samplers etc.

For further information contact Harman Audio in Borehamwood, telephone 0181-207 5050.

#### Meyer Launches . . .

Meyer Sound will launch its new HD-2 self-powered high definition mid-field monitor at the Paris AES, combining existing horn technology with a new approach to phase correction. The HD-2 is available with a choice of HF geometry to suit different boundary and mounting conditions. Designed to provide improved accuracy, each HD-2 is hand-aligned according to Meyer's patented amplitude and phase response alignment procedure. The result is an anechoic frequency response of +/-1.5dB tolerance, from 32Hz to 20kHz.

Both versions of the brand new HD-2 mid-field monitor will be at the AES, together with the full selection of Meyer's sound reinforcement loudspeakers and associated electronics. Complementing SIM System 11 will be Super-Lab, which is also making its European debut. This system is designed to extend the use of SIM System II for detailed room reverberation analysis, using live or amplified music as the source under actual performance conditions.

For details contact Meyer Sound Europe in Reading, telephone (01734) 267990.

#### Ivanhoe Rides Again

Robert Juliat's new compact 2500W HMI followspot will go into production at the end of January. The Ivanhoe and the Heloise followspots are aimed at TV studios, medium-sized theatres, touring and multi-use venues.

Based on the SNX HMI profile, the same double condenser optics are used, but with the addition of an extra tough quartz condenser lens. The Heloise model is very compact at less than a metre in length, whilst the Ivanhoe is just over. They both have a fully closing iris, in a removable cassette, integral colour changer and gobo holder. Two trunion arm configurations allow for both FOH and overhead use. A soft glass filter operated by a flick lever is provided and also a dichroic colour corrector slot. The followspot will be available with a manual fader or with the CAD 900 control system (again from the SNX profile).

For further details contact Decoupe in London, telephone 0181-505 8522.

#### Yamaha Upgrade

Yamaha has announced a software upgrade for the DMC 1000 digital mixer. The V3.0 software enhances the DMC's mixing capabilities for surround sound production and adds new functions for stereo and MS recording.

All inputs and monitor inputs can now be routed simultaneously to the eight busses as well as the main stereo bus. Recording with stereo pairs of inputs is made easier, as adjacent pairs of inputs or monitors can be configured as stereo pairs, and the user can now choose whether or not to copy parameters from left to right channels. MS decoding is now available on the main stereo inputs, and both pads and channel delays can now be adjusted for all channels simultaneously.

For further details contact Yamaha-Kemble in Milton Keynes, telephone (01908) 369269.

#### Court's LX Series

Court Acoustics have launched their LX series of club and contractor speaker systems. Designed for the smaller budget, the range includes the LX3 and LXBASS, both of which can be used with a single amplifier, providing a great saving on power amplifiers and electronic crossovers.

For full technical specifications contact Court in Windsor, telephone (01753) 833524.

#### **Smart Pub Music**

A new computer-controlled music system for pubs and bars - the IMS3 - can, it is claimed, increase turnover by 30 per cent or more, following controlled trials for Whitbread and other major operators.

Made by Databeat Digital Music Systems, the Intelligent Music System 3 is the brainchild of John Leefe, and harnesses the latest in computer technology and multiple CD players to create a system that provides all-day music.

Databeat's IMS3 is a highly sophisticated CD-based system that automatically selects, cues, cross-fades and plays music which adjusts to changing audience needs and allows the user to respond to changes in mood or market.

For more information call Databeat in Newbury, telephone (01635) 521353.



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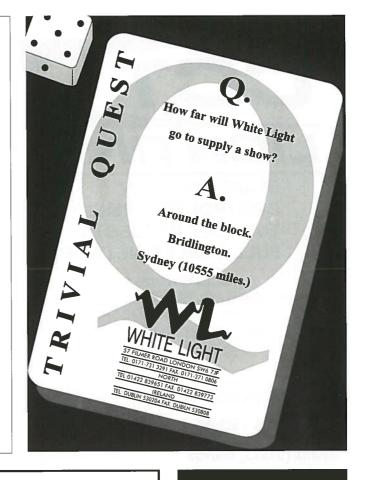
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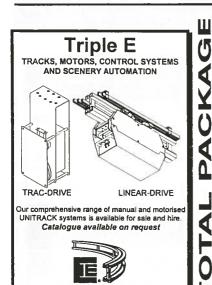
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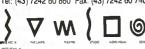
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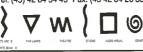


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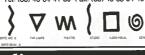
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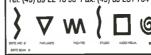
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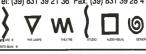
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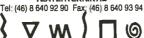
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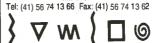
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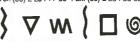
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# VIEWPOINT

### Mike Wood on

## Mighty Morphin' PLASA

I knew things were going too well.

Christmas and New Year were over and had passed, mercifully, without major incident.

I'd managed to force through the crowds at Toys R Us, ducked and weaved (or should it be wove) around the defenders in the aisles and snatched the last Power Ranger in the East of England from under the nose of a hesitant Granny. Limping back through the checkout I'd thanked Michael Grade for the lessons learnt from American Football on Channel Four.

So, as I said, Christmas with Magazord was over, the last turkey curry was a fading memory and the pre-sales figures for January looked good - what could possibly go wrong?

A phone call from the assistant editor of Lighting + Sound International. "We need a Viewpoint for the next issue Mike, do you think you could turn one out, something to do with the development of PLASA, we thought". Well, it appeals to the ego to be asked to write for this prestigious journal so I hesitantly agreed. "OK, but you know I can never write anything without a deadline; how long have I got?" "Well today's Friday, this afternoon would be best but I suppose that's too tight - say Monday morning?" (Obviously the turkey curry got the better of Mr Wood, because he was actually given three weeks to write it. - Ed.)

A whole weekend for one page! - should be no problem. Of course I'd forgotten that we were visiting my wife's relatives on the Saturday and had guests on the Sunday. So it's now 10.00 Sunday night and I've got to come up with 1,000 pithy, controversial words before I can go to bed.

Now I don't know about you but I've never found it easy to write to order. I'm fine if I've got a subject I feel strongly about or a specific aim in mind but give me a blank sheet of paper headed 'Viewpoint' and I'm struggling. After coming up with a few trivial ideas I give up and start writing about Toys R Us and turkeys.

There is a point to all this drivel, some connection between my struggle to write this article and the position PLASA finds itself in at the

PLASA has always had strong goals to aim at. In the early days it was simple, in the words of Mickey Rooney - 'Lets put on a show!' Then came this magazine and expansion of the show. All the time the membership was steadily increasing and there were always major targets to head for and problems to overcome.

Over the last five years we have seen a major recession (as if you didn't know) and it has been a fight for everybody to keep their businesses going. PLASA itself has been through a financially sticky patch, but is now in a strong position with many of its main aims fulfilled. We have a standards officer to assist us and we regularly organise three or four overseas missions a year.

The Light & Sound show has found both a long-term home in Earls Court and apparent



Mike Wood has been at various times a followspot operator, theatre electrician, lighting designer, planning engineer with the BBC and at the moment is technical sales director with JEM Smoke Machine Co Ltd. This year he 'celebrates' 21 years in the industry. Mike is currently PLASA

financial stability. Lighting+Sound International under John Offord and Ruth Rossington goes from strength to strength and is well respected throughout the world. The recent merger of PLASA with the Sound & Communication Industries Federation (SCIF) looks, in these early days, to be pleasingly successful, with benefits to be gained for both parties. For PLASA it also means the attainment of another goal. I believe that we have now achieved 'critical mass' in our membership and can become totally self-sufficient.

Where does that leave us? PLASA may have in some ways reached the same position as I have the blank sheet of paper headed 'Viewpoint'. The immediate problems of survival are known and solvable - what do we now do with this potentially very powerful tool?

It's relatively easy to come up with a number of small schemes to help the inclustry along and I'm pleased that many are now getting past the drawing board stage, but I'd love to see PLASA instigating some major initiatives to lead the Entertainment Technology business into the 21st

We are in a unique position - I can't think of any other industry which has the world-wide spread and commonality of purpose that we have. Many companies outside our industry think they have achieved a major export coup if they manage to sell something to the Channel Islands while everybody in PLASA either export to, or has worked in, every corner of the globe. In fact, we need to have this global view, simply to survive.

The United Kingdom's expertise in this sector is respected worldwide; we MUST capitalise on our strengths. This is in the best interests of us all, not just PLASA manufacturer members, but distributors, dealers and users.

Now it's all very well me going on saying we need to instigate major initiatives, but what? This is where you come in! I don't have the answers, I wish I did - but maybe you have. Where do you think this inclustry should be going? What can PLASA do to help or to make your life easier?

Maybe you don't think PLASA should do any more than run a show and a magazine. If that's the case then tell us so. PLASA needs your opinions.

Over the next year or so PLASA should have the resources to make things happen - it's up to the members what those things are.



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