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International



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- A Sondheim Trio - Passion, Company and A Little Night Music
- Star Attraction: the Science Museum's Star Trek Exhibition
- L+S's annual report from SIEL in Paris
- Lights, Sound and Production in South Africa - the Rainbow Nation
- On Tour with Icelandic Superstar, Björk
- Bright Lights, Big City: Howard Eaton on Lighting Techniques

PLASA

MARCH 1996

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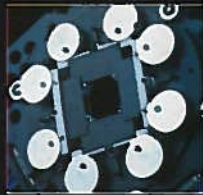
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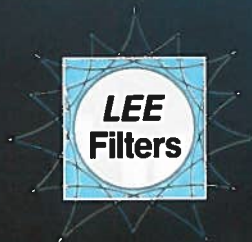
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MARCH 1996

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Vari-Lite adds Claim to High End Lawsuit

The long-running discord between Vari-Lite and High End concerning alleged patent infringement looks far from being resolved. News reached L+SI's offices this week that the Federal Court in Dallas, Texas, has granted Vari-Lite permission to file an additional claim to its lawsuit with High End Systems. The suit charges High End with infringing a number of Vari-Lite's patents.

The new count charges High End Systems with misappropriating a number of Vari-Lite's trade secrets by deceptively obtaining possession of VL5 wash luminaires. Vari-Lite alleges that, under High End System's direction, the luminaires were borrowed by a third party from a Vari-Lite office under the pretence of conducting a demonstration for a potential client. Vari-Lite further alleges that instead of going to a potential client, the luminaires were transported to High End System's Austin, Texas facility where they were analysed by High End personnel.

Vari-Lite has asked the court to prohibit High End's use of all misappropriated proprietary information belonging to Vari-Lite, and to stop the manufacture, use, and sale of all High End

Systems' products, specifically the Studio Color automated wash luminaire, which may have benefited from this misappropriation. Vari-Lite also seeks to recover damages and attorney fees.

In response to the claim, High End issued the following statement: "High End Systems Inc believes Vari-Lite Inc's most recent allegations are a continuation of Vari-Lite's unprofessional marketing practices, aimed specifically at High End's highly regarded Studio Color automated wash luminaire. High End views Vari-Lite's allegations of trade secret misappropriation as completely unfounded and does not believe that Vari-Lite's tactics will succeed.

"High End is an innovator in the entertainment lighting industry. Innovations such as Studio Color are beneficial to the growth and success of the industry. High End is disappointed that Vari-Lite has resorted to unsubstantiated legal claims to attempt to stop the manufacture, use and sale of all High End Systems' products, thereby reducing the possibility of fair competition in the industry. High End will vigorously defend itself against these claims."

Martin PAL Revelation

Martin Professional believe they have developed a global rental structure and support package for their new luminaire, the PAL 1200, which will set the production lighting rental industry on its head. The PAL 1200 is Martin Professional's most sophisticated and powerful lighting product yet.

Martin's PAL 1200 Global Rental Network, which will be extended to other comparable products yet to come, will tie together selected rental houses with Martin's global distribution network, and the formidable PAL 1200. In what can be seen as a demonstration of their newly acquired financial strength since becoming a publicly quoted company, Martin say they will be able to warrant the most competitive hire rates through the favourable terms they will empower their Global Network partners to offer to the rental companies.

Approved rental houses will be able to participate and Martin are even establishing two 'Martin Universities' in the USA and Denmark to carry out training. The company will guarantee a pool of more than 1000 PALs throughout the world for touring purposes and that there will be at least 50 spare PAL 1200s directly on hand in any country.

Tony Gottelier

Scottish First

In mid-February, the BBC Studios in Glasgow played host to the first-ever Scottish Lighting Show. Organised by Joe Breslin, a member of the BBC Resources Scotland team, the event, sponsored by PLASA, was well attended, despite the adverse weather and travel conditions. Pictured right is Joe Breslin (centre) with L+SI's Barry Howse (left) and PLASA treasurer Matthew Griffiths. Full story on page 36.



... And Martin to Enter Moving-Yoke Fray



As this L+SI exclusive photograph of the prototype reveals, Martin Professional intend to launch a new automated-yoke, colour wash luminaire at PLASA 96. L+SI believes that it will be a 1200W light with a variable field angle facility and full colour mixing.

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DHA's Big Move

DHA Lighting's new building in Waterloo Road, London, is an impressive three storey affair with almost five times the amount of space afforded by their previous premises in Jonathan Street. To accommodate its continuous growth, DHA has moved four times since its origins in 1971 and now has around 40 staff.

The move went smoothly and the company were relocated and fully functional within four days - only two of them being lost working days since the majority of the move took place over a weekend. As a result of the move, there is now room to entertain in comfort, and DHA's designers are in the process of setting up a permanent demonstration studio where they can exhibit all the company's products.

The production areas for Digital Light Curtains and Moving Effects have been enlarged, and more technicians are being recruited. Recent Digital Light Curtain commissions include *Miss Saigon* in Duisberg and the new production of *Tommy* at London's Shaftesbury Theatre. The Digital Light Curtain is also about to make its rock and roll debut in the 1996 Sting World Tour.

Perhaps the main beneficiary of the increased square footage is the graphics department, whose improved facilities include a large darkroom for black and white artwork production, a futher darkroom dedicated to the production of glass gobos and a colour darkroom for producing projection slides. The company say that demand is such that another full-time junior graphic artist has been employed and a full-time imaging technician is due to start in the next few weeks. Additional darkroom facilities mean that DHA



The DHA team at their new premises in London, with Wyatt Enever (green shirt) and David Hersey (blue shirt) seated in the centre of the group.

director Wyatt Enever can finally expand his area of expertise, that of colour slide production. He can now produce full-colour Ciba slides, in house. He recently produced slides for the award-winning *Glass Menagerie* and his most recent offerings are currently being tested for the new musical *Martin Guerre*, which opens this month. More space also means more stock and over

450 standard gobo designs are now held on DHA's premises with a further 250 library designs available within three days. DHA's extensive range of gobo designs fits most mainstream theatre, film, TV and photographic lanterns and is set for expansion in the autumn of this year.

DHA's new address is 284-302 Waterloo Road, London SE1 8RQ. Telephone 0171-771 2900.



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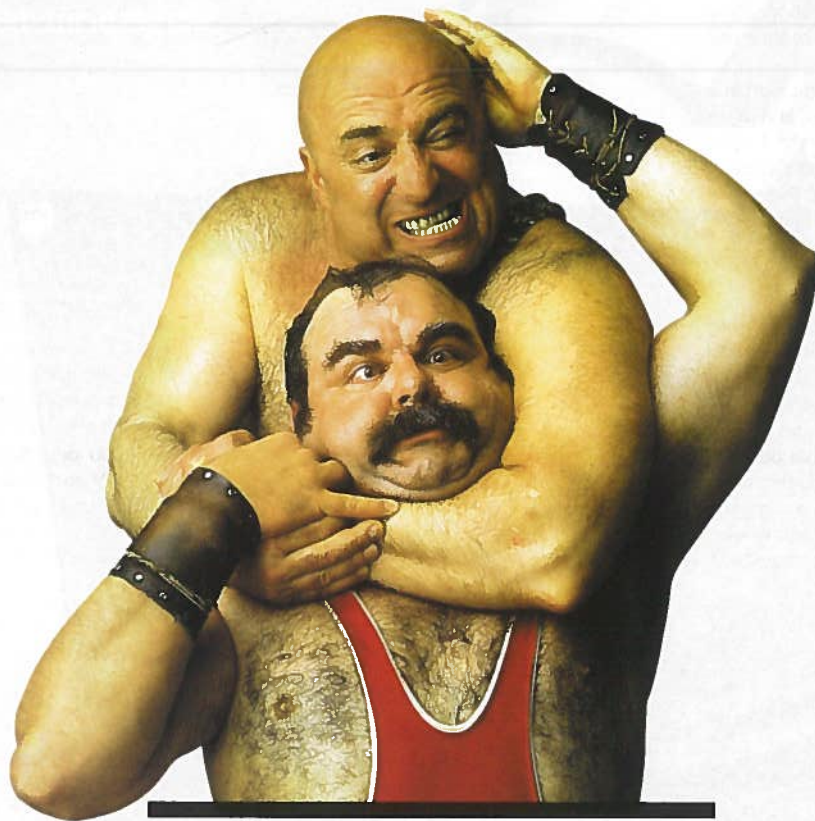
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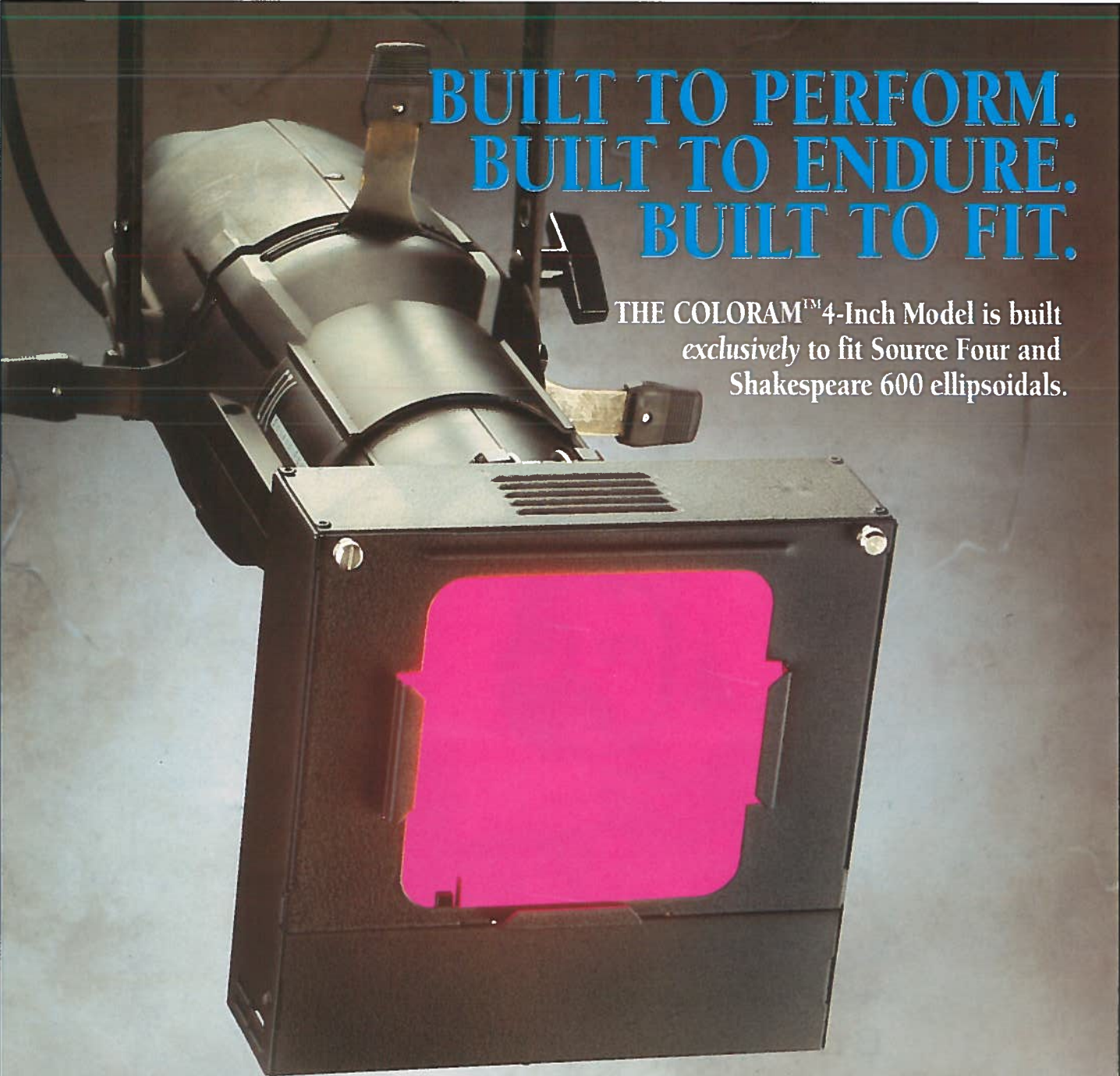


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Las Vegas' Fremont Street Experience



The Fremont Street canopy.

Las Vegas is two cities in one. Downtown Las Vegas is where Vegas' current form as a gambling mecca began when the first Nevada gaming license was issued to the Northern Club on East Fremont Street in 1931. Fremont Street later came to be the most familiar visual image of Vegas: a glittering line of neon-fronted hotels with the cheerful waving cowboy Vegas Vic at one end, seen in hundreds of films and photographs.

Recently, though, the 'other' Vegas - the area known as the strip, near the airport and a high-speed 10 minute taxi ride away from downtown Vegas - has become the city's growth area, spurred on by the construction of Caesars Palace and, in the late eighties, by the Mirage Hotel. This typified the 'new Vegas' - designed to appeal to families, and a new, clean image was needed. Neon seemed too naff, so instead the Mirage built a volcano, erupting in real flames every 15 minutes after dusk, on its front door. All new hotel construction - and there has been a great deal, with Vegas being about the only American city currently increasing its quota of hotel rooms - has since taken place at this end of town. Downtown Vegas acquired a seedy, dangerous reputation.

This, of course, didn't do much to boost the business of the hotels around Fremont Street, so in 1993 the hotel owners banded together to try to tackle the problem through a programme of urban improvement based around one centrepiece - the \$70 million Fremont Street Experience. Based on a plan proposed by architect Jon Jerde, this involved closing the street to traffic, paving and landscaping it and providing a roof over its entire length to create a pleasant, shaded pedestrian walkway between the hotels and casinos.

Pedestrianisation schemes in the UK were never like this! The Fremont Street project is unlike anything else in the world - the curved space-frame roof stretches 90ft into the air at its highest point, and runs the 1500ft length of the street supported by 16 columns and 43,000 struts. By day, the roof provides shade from the glare of the Vegas sun while still allowing daylight to reach the street. But by night, the roof comes to life...

Embedded in it are 2.1 million light bulbs, each containing red, green, blue and clear lamps - what else would you expect in the city of lights? Each of

these lamps can be switched to any of eight brightness levels, allowing 65,536 colour combinations. And each is individually addressable, making the roof - unofficially - the world's largest graphics display system, perhaps 50 times larger than the previous record holder. The sign, created by the Young Electric Sign Company (YESCO), the company behind many of Vegas' neon monsters, is controlled by 30 computers overseen by one master computer, with a total storage capacity of 100 gigabytes. Running along it hourly every evening are animations devised by Jeremy Railton & Associates and produced by computer animation company See3 and the Baer Animation Company.

Accompanying the animations are soundtracks by David Steinberg, replayed through 208 loudspeakers arranged into 56 groups suspended along the length of the street. These clusters are controlled by a 32x16x56 Level Control Systems automated matrix, which allows sound to be moved along the street to match the animations. The sound system was originally conceived by Alan Howarth with the installation then handled by Atlandia Design, part of the Mirage hotel group.

The street also features a lighting rig designed both to colour the roof when not running an animation, and to add dynamic effects to the animations. Designed by Norm Schwab and installed by Cinema Services and Production Arts Lighting, the scheme includes 68 Irideon AR500 units strapped to the supporting columns, 16 7000W Skytracker searchlights and eight Robo Mirror fixtures fixed along the centre of the roof. Production Arts also supplied the show control; the lighting rig is controlled through DMX distributed over a fibre-optic Ethernet network to ensure isolation in case of electrical faults or lightning strikes, while shows are synchronised using SMPTE time code.

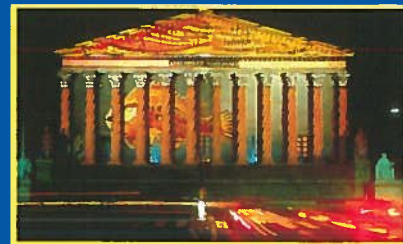
The show control system also has to fulfil two other important functions: switching off all of the neon lights on the hotels along the street at the start of each show, and switching the traffic lights on the roads that cross Fremont Street to red during shows, so that people looking up at the roof aren't run over!

Robert Halliday

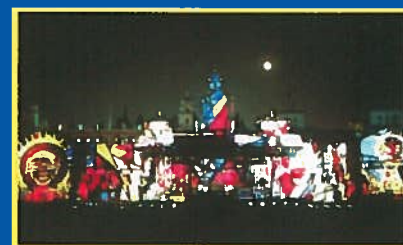
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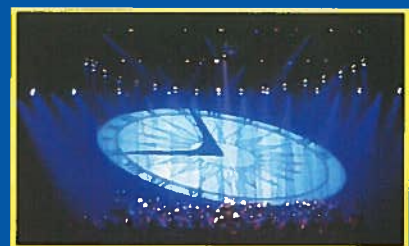
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PLASA at EnTech

PLASA (Professional Lighting and Sound Association), the leading industry trade association, will be present in force at EnTech in Sydney (April 23-25, 1996) with a group of 22 companies, one of the biggest-ever trade missions from the UK to Australia. With the support of the British Government's Department of Trade and Industry, EnTech is one of four major trade missions organised by PLASA during 1996. The Sydney team will be led by PLASA's chief executive John Offord and also include editorial staff from the Association's magazine *Lighting+Sound International*, there to report on the event.

The list of companies exhibiting with PLASA at EnTech includes many of the leading names in the entertainment technology field:

AC Lighting, Avolites Ltd, Axon Digital Design, CCT Lighting Ltd, Citronic Ltd, Cloud Electronics Ltd, DHA Lighting Ltd, Doughty Engineering Ltd, Celco/Electrosonic Ltd, JEM Smoke Machine Co, Lighting Technology Group, Le Maitre (Sales) Ltd, The M & M Group Ltd, Martin Audio, Optikinetics Ltd, Penn Fabrication, Pulsar, Soundtracs plc, Stage Technologies, Wharfedale Loudspeakers Ltd, White Light (Electrics) Ltd and WDR (World Discotheque Review)

"After the success of the first EnTech event in 1994, and the approach of the Millennium Olympiad in Sydney, our members are looking to consolidate their position in the Australasian market or set themselves up with the necessary distributors," explained John Offord. "It will also provide us with an excellent opportunity to meet several of our international member companies and further develop worldwide contacts, endeavouring to get them to do the trip in reverse and visit our own big annual event at London's Earls Court in September."

Numark go Tribal

Numark mixers and other DJ electronics have again been specified for exclusive use at the next Tribal Gathering event. The previous Tribal Gathering, held in Munich last November, was also equipped with Numark mixers.

The company's Nick McGeachin told L+S: "The event represents the high point of the year for the world's DJs and techno music fanatics. We rely heavily on feedback from DJs, and we received a lot of positive comment from them following last year's event.

The 1996 Tribal Gathering will be held near Oxford, UK on May 4th. A crowd of over 35,000 is expected to turn out to see top DJs including Carl Cox, Danny Rampling and Paul Oakenfold.

SAE to Begin DJ Course

The London school of Audio Engineering is soon to introduce a three-month part-time course for budding DJs, which will provide the same degree of hands-on practical experience as other courses that have been successfully run in the past.

The course will cover everything from the basics of sound to the most advanced DJ mixing techniques, including pitching, cueing and stuttering effects, BPM matching, CD mixing, remixing, EQ control, talk-over and equipment maintenance. The course will also include regular visits to major club venues, lectures by notable DJs and guidance in club management and promotion. For further information contact the London SAE, telephone 0171- 609 4189.

Digital Mobile Recording As The Crow Flies

Raper & Wayman have supplied equipment to a new mobile recording facility, called As The Crow Flies. The studio, squeezed into the back of a Renault Master van, is made up of Professional Monitor Company AB1s, driven by a Bryston 3B amp, a Mackie 32-channel 8-buss console and a Yamaha Pro Mix 01 digital console, plus a range of microphones, effects and DAT machines, all from leading manufacturers. The mobile studio is run by Pete Freshney, who spent many years working with the BBC, recording music and speech-based programmes.

3G Aim for End User

3G Ltd are changing their distribution arrangements for the UK. HW International, a 3G distributor for a number of years, will supply the budget 'Mynah Plus' series of mixers only.

All other professional models and products will be supplied, factory direct, to the end user by 3G. These include the Silk series and Signet series consoles, the Fireball automated live console, the Professional DB420 mic pre-amp, the DMC62 disco mixer (not previously available in the UK) and the GA42 electronic crossover.

In a separate move, 3G Ltd have appointed new distributors in the Far East and in France. Powersonics (Asia) will serve China, Hong Kong, Taiwan and Macau, while Audio Sud will serve France. The appointments are in keeping with the company's continuing policy to establish professional distributing companies in every country in the world. Audio Sud recently displayed 3G products at the SIEL show in Paris.

3G Ltd can be contacted in Southend-on-Sea on (01702) 420645.

Broadcasting Topaz



Soundtracs Topaz Console at Russkoye Radio.

Soundtracs Topaz sales continue to grow world-wide, with an increasing number of consoles being used in the broadcast market.

Russian distributor MS-Max report that high quality sound and reliability are the priority and not just economic concerns. The product range has been well received in Moscow, Novosibirsk, Kemerovo, St Petersburg, Kiev and other cities with the recent installation of a Soundtracs Topaz Project 8 for Russkoye Radio - Moscow.

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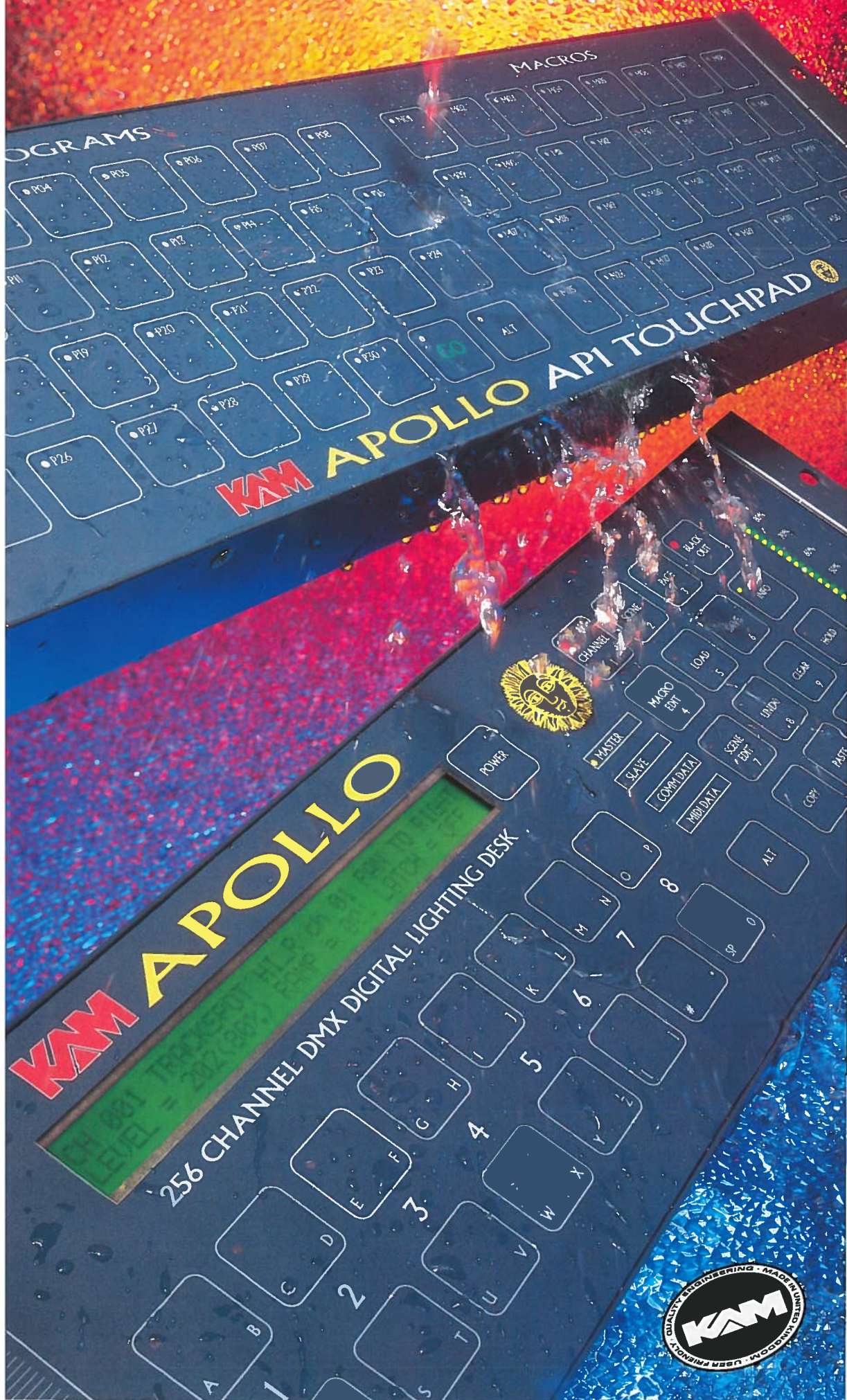
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LIPA's Final Phase: Audio and Communications



Pictured above are Mark Featherstone-Witty, chief executive of LIPA, with Spencer Brooks of Marquee, Jon Thornton, also of LIPA and Andy Baker of Marquee.

Following our recent coverage of the lighting and audio installation at the Liverpool Institute for Performing Arts, together with its official launch last month, we are now able to add the final piece to the jigsaw on the sound side.

Marquee were responsible for the design and specification of all studio and communications systems, including the main data and telephone networks and the MATV system.

The company was first introduced to the LIPA project late in 1994, when they were asked to visit the site in Liverpool to discuss ways of being involved. Subsequently Marquee's Spencer Brooks contacted the Harman-Pro Group and Yamaha to discuss the project.

Marquee then put together a consultancy team to work with LIPA on what is probably one of the most complex audio and communications projects ever undertaken in the UK. Andy Baker of

Marquee Special Projects and Sam Wise of Sam Wise Associates worked together with the growing LIPA staff to design systems that would support the developing curriculum and provide a basic infrastructure for some of the latest technology.

During 1995, Marquee were also contracted to carry out the installation of the majority of the audio and communications systems for two auditoria, five sound recording studios, a radio studio, two video edit suites, three midi suites - each having 10 workstations, 27 practice/rehearsal rooms, five portable systems and background systems in the bar and canteen.

Once designs had been completed and agreed and the process of specifying and obtaining the vast amount of sound equipment required for the project had begun, the task of on-site work had to be addressed.

Sarner in Legoland

Attraction specialist Sarner International has designed and installed the lighting and sound systems for Legoland Windsor's shows. The shows, each specially designed for the Park, include the Brick Builders Rock 'n' Soul Revue in the Imagination Theatre, Brickadilly's Circus Show, where children are the stars of the show, My Town Harbour Adventures, an all-action stunt show based around the harbour in the Park, and Fairytale Fable and Fun at the hollow stage puppet theatre.

The designs include equipment from several leading manufacturers: the audio systems comprise EAW loudspeakers, Crest amplifiers, Trantec radio microphones, Mackie 16-channel mixing desks and Denon CD players. The lighting systems also feature leading manufacturers including Zero 88 who provided control and dimming and Thomas who supplied Par lights. Legoland will be opening to the public on March 29th.

The company are no strangers to major theme-park based projects and have also recently picked up the contract to design and build their third major attraction in Norway. Based 1,000 miles inside the arctic circle, Saltstraumen is located close to a naturally forming whirlpool or maelstrom. Following on from the successes of the VikingLand and Lillehammer attractions, Sarner will develop the site found at one of the most northerly points in the country.

The proposed all-weather visitor attraction will contain a multi-sensory show which will include a number of powerful special effects.

Avolites Lend a Helping Hand to Children's Charity

Steve Warren and the Avolites team lent a helping hand to a charity gig at the end of February, in aid of the respiratory unit at Great Ormond Street Children's Hospital. The show, called *One From the Heart*, took place at The Bottom Line in Shepherd's Bush, London, and featured Mica Paris, Andrew Roachford, Geoffrey Williams, China, Noel McKoy and Ellaguru. Lighting designer Paul Emery, with support from the Avolites team, supplemented the venue's house rig of 24 Par cans with Clay Paky Super Scans and Pulsar strobes. An Avolites Sapphire console was brought in, and the dimming system was upgraded with an Avolites 36-way DMX rack. Followspots and additional Par cans were supplied by Neg Earth Lights.

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Wholehog II Hits Broadway

Flying Pig's Wholehog II has been specified to control the automated fixtures on the Broadway show *Big the Musical* which opens on May 1st at the Shubert Theatre in New York.

Top US designer Paul Gallo opted to use the Wholehog II for his latest project when combining the features of 18 Vari-Lite VL5s and 34 High End Cyberlight SVs in one design.

AC Lighting's Glyn O'Donoghue told L+SI: "The Wholehog II is continually evolving. Designers and programmers have an opportunity to tell us what they like and dislike about the console and then see their comments reacted upon in future software updates. During programming of *Big the Musical* for example, Paul Sonneitner, the moving light programmer, and Vivian Leone the associate designer had several suggestions we were able to incorporate to help make the transition from programming with a standard theatre console to working with the Wholehog II more straightforward. In the US alone we now have consoles controlling lighting fixtures not only on this Broadway show, but in several of the huge showrooms in Las Vegas, on the Neil Diamond, Sting and Cirque du Soleil tours and in Disney World in Florida."

Check out the new

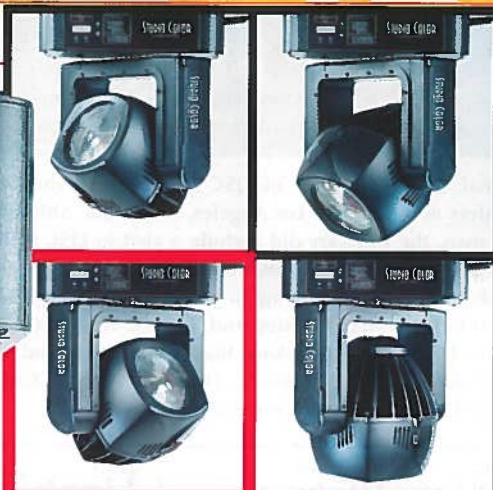
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California Dreamin' for QSC Dealers



HW International, sole distributor of QSC amplifiers in the UK, recently rewarded their best performing dealers with a trip to Los Angeles, California. Although for the most part the dealers' time was their own, the itinerary did include a visit to QSC's modern manufacturing site in Los Angeles. Pictured outside QSC's premises are HW sales manager, Dennis Harburn and area manager Peter James with Terry O'Neil (Moonlighting Discos), Neil Baxter and Graham Wood (Sound Power) Mark Metcalfe (BlueBox) Mike Henden and Richard Weston (Leisuretec), Tom McDougal (Hobbs Components), Paul Osbirtan (PDS), Andy Blackwell (Dial Sound and Light), Ian Potter (Leamington Sound and Light), Ken Foster (Harpers AV), Dave Thompson (CC Music) Paul MacCallum (Wembley Loudspeakers) and Cliff Caldecott (Concept Lighting).

Crest's New Victory

Crest Audio amplifiers and mixing consoles have been installed at the New Victory Theatre in New York, which opened in December last year as the first completed project of the regeneration of the city's 42nd Street.

The installation was carried out by ProMix Studios of New York, headed by theatre sound expert, Steve Schull. Schull had a total of 16 Crest amplifiers installed to power the theatre's EAW loudspeakers. The majority of the amps are from Crest's FA series, with three FA1201s, two FA2401s and seven FA901s joining two FCV440s and two LA601s in the racks. In addition to the amplification, the New Victory has a Crest Century GT console for FOH mixing.

Linebacker in Chatham

The Central Theatre in Chatham, featured in last month's L+SI, is the first installation to receive Zero 88's acclaimed Linebacker.

Supplying and installing almost all of the equipment for the venue, Trafalgar Lighting specified the Linebacker to function as a rigger's remote, although they suspect that it will grow in importance as, through this, the lighting and effects system is operated from the sound desk.

One of the specifications of the project was that the system must be controllable by one person for simple shows, and this is now possible, with even the Effects Company smoke machine being controlled by DMX. Zero 88 LTC dimmers also feature in the installation.

Limelight Interest

Lighting Technology report that the interest shown in the Limelight 2kW Xenon followspot during last year's PLASA Show by the large contingent of international visitors has quickly borne fruit. Last month, three units were purchased by Birmingham Hippodrome, and now two units have been sold to Seoul Stage Lighting (Vari-Lite Korea).

Limelight's features make it suited to the stringent requirements of ballet and opera applications. Its robust construction and practical flat bottom, which aids transportation, are also suited to the needs of lighting hire companies.

Midas Supply College

Salisbury-based Midas Sound and Lighting has supplied a wide range of equipment to Salisbury College for their City & Guilds sound engineering course. The equipment list includes four Martin Audio EM15 loudspeakers, six Soundtracs Topaz Macro mixing desks, an Allen & Heath GS1 mixing desk, two Omniphonics Footprint amplifiers, eight Teac CDP3200 CD players and two Tascam DAT machines.

Midas also supplied Electro-Voice and Audio Technica microphones and processing equipment from Peavey, Alesis and Drawmer.

VPLT Forum

The Frankfurt Music Fair (13-17th March) will once again feature the VPLT Forum, a programme of seminars which will be held within the framework of the Pro Light & Sound section, itself an independent part of the Frankfurt Show. The VPLT has lined up a number of leading professionals in the industry, including lighting designer Patrick Woodroffe and Gunter Jackle. The programme will feature nine seminars taking place from 13-15th March. Tickets for the Forum can be obtained from the VPLT stand.

L+SI will be sharing a stand with PLASA at the Frankfurt show and can be found on the World ETF stand outside Hall 5.1. A full report on the product launches will appear in the April issue of L+SI, and also in the March/April issue of sister publication, Sound+Communication Systems International.

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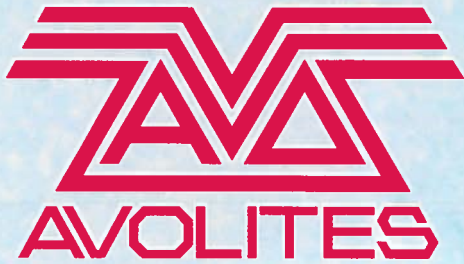
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Massive Attack

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Bon Jovi

(Best International Group: LD David Davidian uses a Diamond)

Björk

(Best International Female Vocalist: LD Paul Normandale is using a Pearl)

Take That

(Best Single: LD Simon Tutchener uses a Diamond II)

Michael Jackson

(Best Artist of a Generation: LD Peter Morse uses a Diamond)

Alanis Morrissette

(Best International Newcomer: Sapphire used on a recent U.S. tour)

AVOLITES: PERFORMANCE RELATED RESULTS

Crest at Super Bowl

Crest Audio Professional Series amplifiers provided power for the pre-game, post-game and half-time shows during Super Bowl XXX between the Dallas Cowboys and Pittsburgh Steelers at the Sun Devil Stadium in Tempe, Arizona in January.

Pro Mix of Mount Vernon, New York, was among the companies contracted by Larry Estrin of Best Audio to provide sound reinforcement for the National Football League's international showcase event. The system consisted of 14 portable carts that were rolled on and off the field by five-man teams. Each cart included a rack with a Crest 9001, 8001 and 6001 to power the three EAW KF860 loudspeakers on each cart.

The system was broken down into four zones, with a BSS Omnidrive on each. A total of 24 dual 18" subwoofer cabinets were distributed in the field corners and were powered by Crest 9001s.

In addition to the house system carts, Pro Mix supplied EAW stage monitors and fill systems powered by Crest 7001s and 6001s for Vanessa Williams' rendition of the National Anthem and Diana Ross's half-time performance.

Kimbolton Fireworks head for Montreal

Huntingdon-based fireworks manufacturer and display company Kimbolton Fireworks are preparing to take part in the 12th International Fireworks Competition in Montreal. This is the largest competition of its kind, attracting entrants from all over the world. Kimbolton's previous appearance at the awards earned them the coveted Silver Jupiter award for 'professionalism, dynamism and pyrotechnic excellence'.

The company carry out around 250 displays every year, and one of the highlights of '95 was the enormous fireworks display on the River Thames on VJ Day last August, when more than 18 tonnes of pyrotechnics were launched from five floating barges between Westminster and Tower Bridge. The display was praised for its originality, and the synchronisation of the firework bursts with the 10 pieces of music that accompanied the display.

Craft on the Run

Arena Mobiles, one of the UK's leading outside broadcast companies, has purchased a new Soundcraft B800 broadcast console as the centre piece of its new flagship OB truck.

Arena have a large fleet of purpose-built OB vehicles, but their new 22 tonne, 52ft long, custom-built Scania 113 is the largest yet - a 16 camera truck which is a complete mobile TV studio. The new vehicle is due for completion in March, after which it will be kept in constant use by some of the company's major clients including LWT, Sky Sports, FOCA (Formula One Constructors Association) and the BBC.

One of Manchester's top live venues, Band On The Wall, has recently purchased a Soundcraft Venue II front-of-house desk and a DC2000 digitally controlled recording console. Situated in the heart of Manchester, the club provides the city with the best in jazz, blues, reggae, soul, African and Latin music. The venue not only has a live area where the Venue II is installed, but a studio also which provides 24-track digital recording via the DC2000 and three Tascam DA88s. Band On The Wall has, over the last few years, made several live recordings for CD release using a direct split feed to the studio from the stage below.

Singapore Arts

Lighting designer Kevan Shaw has just returned from Singapore where he designed the lighting for the inaugural exhibition of the new Singapore Art Museum for Singapore's National Heritage Board. This project was undertaken in association with Elsdale Lighting Design in Singapore, with whom Kevan R Shaw Lighting Design are also working on the Singapore Discovery Centre, due to open later this year, and the Singapore Parliament House project, scheduled for completion in 1997.

The Art Museum is situated in the former building of The St Joseph's Institution, one of Singapore's noted schools, which has been completely refurbished. The Inaugural exhibition 'Modernity and Beyond' encompasses a review of art in Singapore in the last 100 years and an exploration of themes in South East Asian Art.

Lighting this exhibition presented all the challenges associated with museum lighting - the perennial problem of balancing conservation lighting requirements with display requirements. The variety of materials used in modern art create more frequent requirements for the lower level of 50 Lux than is normally encountered in a general art exhibition where there is usually clear borderlines between works on paper or fabric and oil paintings. The thematic linking required that these materials were hung adjacent to each other, so general lighting was set to lower conservation levels and selective spotlighting was used in the majority of galleries to highlight specific works to create rhythms in the space. In some galleries only spotlighting was used to give a more intimate feel.

Rent Book in Print



The Rent Book 1995-1996, published by Little Green Publications Ltd, is now available. Aimed at the broadcast, presentation and recording industries, the first edition contains over 100 rate cards and equipment lists supplied by a whole range of AV, audio (live and studio), video, camera, film, staging and lighting companies from all around the UK. All equipment entries are fully indexed by geographical location, and the book's format aids quick reference.

For a copy of the book contact Little Green Publications in London on 0181-680 9379.

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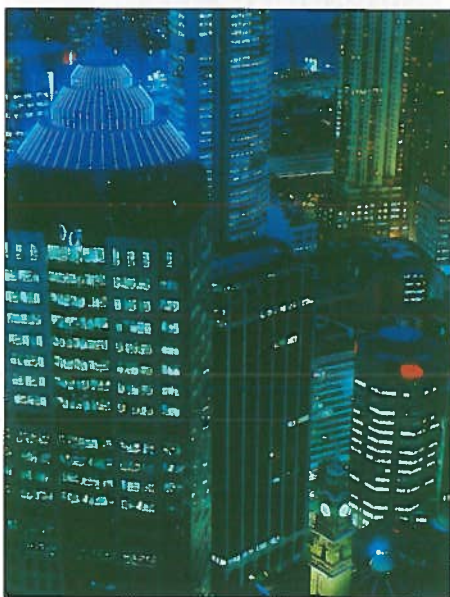
Entech's April Date in Sydney, Australia

Entech '96 will be held from 23-25 April 1996 in Sydney, Australia.

The show will include 20 hours of seminars conducted by experts in the areas of audio, lighting, AV, rigging and business. Guest speakers include Bruce Jackson, president and founder of Apogee Electronics, and 1996 Emmy and TEC award winner for his sound mixing of Barbra Streisand's recent concert tour. Jackson was also live sound mixer for Elvis Presley and Bruce Springstein.

Continuous nearfield monitor and lighting 'shoot-outs' will allow visitors to make an objective product comparison. A virtual Internet area will enable visitors to explore entertainment and technology sites on the Internet. Technical tours will take groups behind the scenes of the internationally famous Sydney Opera House and legendary singer Neil Diamond will be performing at the Sydney Entertainment Centre during Entech. Diamond's own live sound engineer will personally guide a group through the tour's production facilities.

For further show details contact the organisers in Australia, telephone +61 2 876 3530.



Sydney at night.

'An Arc' Relocate

The Reading-based Optikinetics distributor, 'An Arc Light's Illumination', has moved its hire and sales departments to a new 2,000sq.ft site in Reading town centre.

The new premises will house the stock of Optikinetics projectors, effects and attachments, as well as providing much needed space to maintain and prepare the regular lighting production equipment. The company is already in possession of the first 12 of the 60 'K' series projectors ordered for its hire stock this year, and intend to cater for the most visually intensive events planned for the Millennium celebrations.

The company can be contacted in Reading on (01734) 755766.

Choral Sounds

ScanAudio recently completed a major upgrading of the sound reinforcement system at Worth Abbey in Sussex. The existing loudspeaker system had been adapted numerous times over the last 20 years but still lacked the clarity and definition required for this acoustically challenging building.

With the help of the acoustic software programme EASE, ScanAudio established that a single point source system would provide the acoustic improvements required. They proposed the Renkus-Heinz CoEntrant CEF125 wide dispersion speaker to cover the main congregation and a Renkus-Heinz Complex Conic SR81/9 for the choir area.

A new Crown PT2 power amplifier, a Furman Q301B graphic equaliser and Audio Technica AT 873R condenser microphones were also installed.

Color Co-ordination - Lightfactor Previews High End

Lightfactor have announced the long-awaited High End Studio Color wash luminaire demonstrations. These will take place on March 19th, 20th and 21st at the Lightfactor HQ in Greenford, near London.

Another session of general technical training and programming seminars will be running concurrently for which early booking is advised. Anyone interested in attending these demonstrations or the seminars should call 0181-575 5566 for further details.



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Triple E on Track for Television Markets



Triple E's Darryl Hewitt at the controls of the motorised curtain and automatic doors during a rehearsal of BBC1's 'The National Lottery Live'.

Triple E Ltd enjoyed a buoyant end to 1995, with its stage track systems in use all over the world. Their Unicyc track system was developed with the television market in mind and, through Strand Lighting in the UK and Asia, it is finding favour in studios across the world. One of the most intriguing contracts is a twin-track system currently being installed in a new studio within the Kremlin in Moscow, under the guidance of Ed Twentyman of Strand Lighting UK. Other TV studio installations include 230 metres of Unicyc track, plus curves, at TV3 in Kuala Lumpur, over 100 metres of dual and single-track and curves for Star TV, Hong Kong and both triple and single Cyc track for Ren TV in Moscow.

The Triple E equipment with the highest profile is the Unitrack and Trac-Drives combination on the motorised curtain and automatic doors for the set of The National Lottery Live on BBC1, which is dismantled at the end of each show. In addition to the track system, Triple E also supply technical support for the production.

Active HELL

Howard Eaton Lighting has been commissioned to undertake further projects at the Royal Opera House at Covent Garden, London.

The company has extended the data distribution system in the ROH by adding three DMXports to the existing system to allow for an additional 24 dimmers.

The unit has been developed specifically to ensure that the connection of any portable or rental equipment does not interfere with permanently installed equipment. This is done by providing a buffered DMX signal at each outlet point in the venue.

HELL has also designed, commissioned and installed a set of custom M16 footlights for the Royal Ballet, resident at Covent Garden. The design of the units was particularly problematical as they had to fit in to the same space vacated by the conventional footlights which were installed as part of the 1960 refurbishment. The new lights had to be ready in time for the production of *Sleeping Beauty*, designed by Maria Bjornsen, which was revived in January.

HELL has recently added another variant to its existing fluorescent batten. Specifically designed for the Welsh National Opera, the new unit comes in a four foot 36W version.

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Broadway Tommy Comes to Town

One of the most talked about West End productions of the moment is 'Tommy'. Following our news story last issue covering both White Light and M&M's involvement, L+SI has also learnt that the forthcoming production will see the first use of Wybron colour changers in London's West End. Lighting designer David Grill opted for a mix of Scroller and Coloram models for the show and specified the units for their low-noise, reliability, adaptability and that there are up to 32 frames of colours available.

The specification called for 66 colour changers, comprising Scroller 7 digital units, Coloram 7.5s, Coloram 10s and the increasingly popular Coloram 4. They are mounted on a combination of ETC Source 4, Source 4 Par and Arri 2kW Fresnel luminaires. Six of the new I.D. equipped Coloram 24-way power supplies in 19" rack form were also specified. All the gelstrings for the show have been supplied by Wybron's ColorExpress service.

Also appearing for the first time in Tommy are six Wildfire WF400FE floodlights, specified and supplied to Fulham-based White Light, lighting contractors for the show. US Lights is the sole UK importer and distributor of this range of long throw ultra-violet floodlights, Fresnels and ellipsoidal spotlights, manufactured by Los Angeles-based Wildfire Inc. They also supply a



wide range of fluorescent creative materials, paints, dyes and make-up.

The Tommy project is the latest in a long line of credits for Wildfire, which include the feature film 'Batman Forever' (see July '95 L+SI cover story), the soon-to-be-screened television epic 'Cold Lazarus' (Dennis Potter's last work), and innumerable photographic and video shoots, disco and club installations.

Desert Ripples

Howard Eaton Lighting has supplied nine HTI miniature water ripples to DJ Wilrich for use in a project for the Emirate of Sharjah, UAE.

DJ Wilrich purchased the products from HELL on the recommendation of lighting designer David Atkinson. The commission, to complete the Natural History Museum found at Desert Park in the Emirates, included the design, presentation of exhibits, graphics and modelling sets, as well as the lighting, sound, video and interactive computers.

In all, a huge amount of equipment was exported to the site including 16 video projectors, 26 laser disc players, 12 monitors, 54 speakers, 19 amplifiers, seven Apple Mac computers and touch screen monitors, 54 speakers, together with lighting for the whole museum. The Miniature Ripple water effect has been updated to improve cooling. The case now incorporates a custom extrusion, while retaining portability. This modular design can take both incandescent and discharge lamps, whereas previously separate products were required. The product continues to feature an integral fan and use of a combination of a rotating slotted drum and glass slide to create the ripple effect.

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with sound/light chasing built in. Flexi-Flash and Rigi-Flash use strobe circuits enclosed in tubing to generate a synchronised sequence of flashes which can follow the edge of a ceiling rig or any other structure as it can be cut and bent as required. A range of fluorescent colours are available for extra effect under ultra violet light. The Flexi-Flash controller allows you to control up to fifty metres on each zone, and offers the unique facility of firing sequences forwards, backwards or both simultaneously and at different speeds.

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Moon's a Balloon

Classic Lighting and The Searchlight Co have recently negotiated an exclusive agreement for the latter to import into the UK Classic's 'Full Moon' balloons.

The simple, but effective concept of the Full Moon balloon is a lamp inside a helium balloon which when floated above the ground will illuminate a very wide area with a diffused light that produces no glare or shadow.

Already popular in the USA and on the Continent, their uses have been many and varied, including 13 for three Pink Floyd concerts and 20 for the opening of the Planet Hollywood restaurant in Beverley Hills. Other events include the Cannes Festival, the Disney film showing of Pocahontas in Central Park, New York and a performance by illusionist David Copperfield.



Martin Guerre Prepares for June Opening

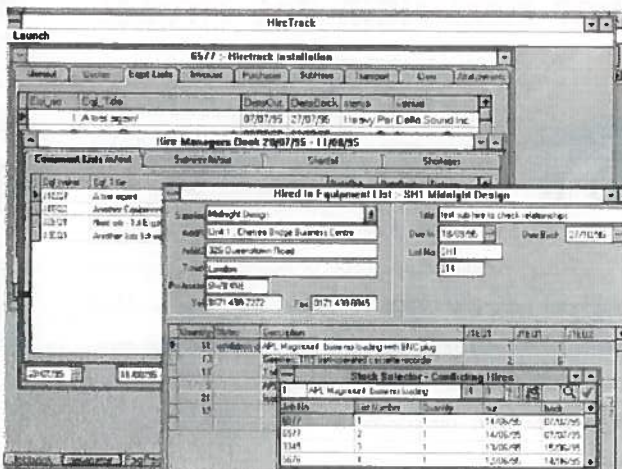
Stage Technologies has been awarded the contract to supply automation systems for the forthcoming production of *Martin Guerre* which opens in London in June this year.

The installation for this latest show by Alain Boublil and Claude-Michel Schonberg (who also wrote *Les Miserables* and *Miss Saigon*), will begin at the Prince Edward Theatre in March. The automation equipment to be provided by Stage Technologies will include 17 variable speed Big Tow winches and six of the new Tow Track units, both of which were highly commended in the 1995 PLASA show awards for product excellence.

The 35 axis control system will be controlled by an Acrobat! control desk, from which cues for the entire show (including counterweight-assisted flying, radio controlled trucks, motorised tracking and the revolve drive) will be plotted and run. The set has been designed by Nick Ormerod, who is well known for his work with the Cheek by Jowl company and his designs for *Sweeney Todd* at The Royal National Theatre and *The Duchess of Malfi* at Wyndhams Theatre in London.

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High End Systems Tour The World

Equipment from Texas-based High End Systems is being specified by lighting designers for a number of forthcoming tours including those of AC/DC, Lenny Kravitz and the Red Hot Chili Peppers, while ongoing tours include Alan Jackson, Billy Ray Cyrus, Elastica and Julio Iglesias, among others. In a slight departure from the company's traditional touring market, HES equipment was recently used on FOX-TV's 'Rock and Roll on Ice' and has also been installed in the Rock and Roll Hall of Fame and Museum in Cleveland, in Boston's new Fleet Center and in New York's Madison Square Garden.

AMS Neve Buy-Out

The AMS Neve group of companies has been acquired by Mark Crabtree (managing director) from Siemens AG Oesterreich. The entire share capital of AMS Neve, together with that of AMS Neve Inc and Rupert Neve Canada Inc are being acquired by Crabtree.

AMS Neve will remain a close business partner for Siemens, who will continue to supply turnkey systems incorporating their equipment. All products will remain fully supported and development will continue on each current type.

Mark Crabtree told L+S: "The success of AMS Neve has been achieved by concentrating on the needs of the customer and the market, and applying technology quickly and effectively to meet those needs. Operating as an independent company will enable us improve our service."

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Optional lenses	—	13 and 9 degree	16°-13°-11°-9°
Electronic focus	*	*	—
Wheel with 7 colours + white	—	*	*
Wheel with 7 special colours + white	*	*	—
Special light blue filter	—	*	—
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Colour temperature correction filters	2	2	2
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Rotating M-size metal gobos	4	2	4
Fixed M-size metal gobos	4	4	—
Variable speed indexed two-directional rotation of gobos	*	*	*
10 additional gobos in metal	*	*	*
Fixed prisms	—	1 (5 facets)	1 (4 facets)
Rotating prisms	2 (4 facets, 3D)	4 (4 facets, 3D, wake, image doubling)	—
Frost filters	2	2	1
Iris	increased speed	increased speed	*
Dimmer 0-100% - Stop - High speed strobe	*	*	*
Rotation of mirror adapter on projector body	360°	360°	360°
DMX 512, RS 232 (PMX), analogue 0-10V controls	*	*	*
Number of control channels	12/16 selectable	12	6/8 selectable

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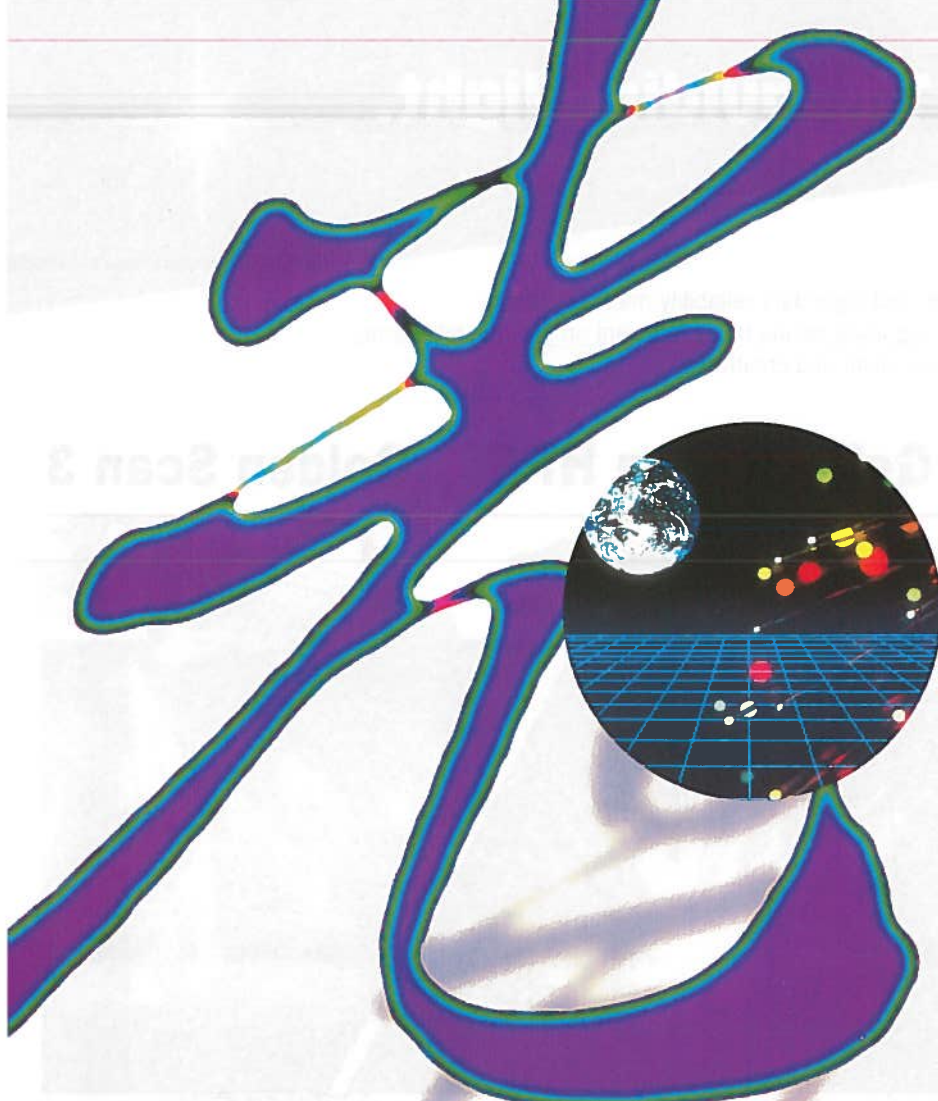
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Whitgift's Timed Tower of Light



Croydon's Whitgift Tower of Light has been awarded planning consent from the local Council. The tower, designed by Dave Geddes Architects, with lighting consultancy undertaken by Jonathan Spiers & Associates, is due to be completed in 1997.

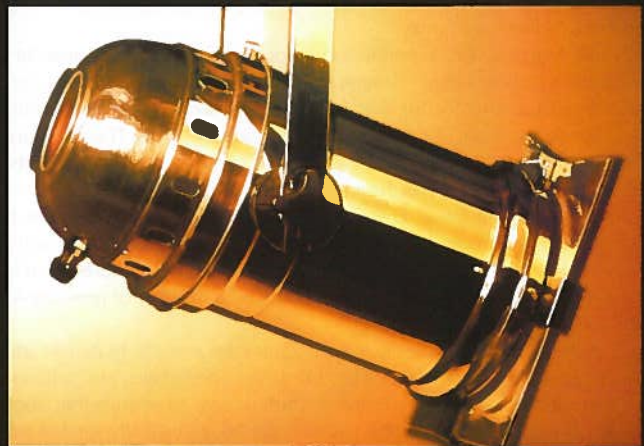
A 51 metre (167ft) high tapering steel mast supporting a transparent cylinder of curved glass 'sails' and topped by a beacon, the £400,000 Whitgift Tower of Light will stand in North End, adjacent to the main entrance of the Whitgift Shopping Centre.

The tower will indicate hours and days by bands of cold cathode light tubes around the glass cylinder, which build up as the days and weeks progress. Minutes will be represented by 'five-minute' blocks of vertical tubes rising to the top of the tower.

The 'striking' of the hours will be marked by 'silent chimes'. These kinetic, multi-coloured light displays will be generated by lighting equipment installed inside the cylinder, including Irideon AR500 colour change projectors and 60 randomly-flashing egg-shaped strobe lights.

Months will be represented by 'lines of light', produced by side-emitting fibre optics, combined with a light box incorporating a six-colour wheel, which changes 12 times a year. The passing of the seasons is marked by the use of contrasting lamp colours in the internal floodlights which illuminate the main mast, from cool white in winter, to warm white in summer.

The lighting system has been designed to allow reconfiguration for special events and public celebrations in Croydon's civic calendar. It is designed for efficient energy use, incorporating low-energy, long-life lamps, dimming controls and photovoltaic panels to generate 'clean' energy.



Edinburgh International Conference Centre



The Edinburgh International Conference Centre, designed by architects Terry Farrell Associates, which opened in September last year, boasts state-of-the-art technical facilities. The magnificent circular theatre of the Pentland Suite features a unique installation by the Industrial Division of the British Turntable Group of Turntable Divisible Auditoriums (TDAs). The centre, built at a cost of £38 million, features the only TDAs to be installed in a purpose-built conference centre and is probably the largest installation of its kind in Europe. The concept is relatively simple, in that a single auditorium can be split into several smaller ones by having sections of seating in the main auditorium mounted on large turntables. At the flick of a switch, the section can be rotated out of the main auditorium to create a new, self-contained unit and in Edinburgh, the Pentland Suite can be subdivided into three auditoria - Pentland, Sidlaw and Fintry.

In North America, this turntable technology has been used to provide conference and meeting rooms of relatively small capacities. Though the concept may appear simple, the implementation requires a high level of precision engineering and British Turntable were involved with the Edinburgh project for four years prior to the start of the installation in January 1994. The Edinburgh project provides for a single auditorium seating capacity of 1,200, with two sections, each of 300 seats, being built on 18.5m diameter turntables, each of which weighs an incredible 200 tons.

A unique feature of these turntables is the incorporation of a balcony level above the seated audience to house projection room facilities, simultaneous translation booths and separate entrances for technical personnel. For safety reasons, the units are intended to be rotated with no-one on them, and to this end any potential trapping hazards are prevented by a number of pressure-sensitive safety switches located on the revolve and the gallery level.

Each auditorium is acoustically independent - the acoustic materials and finishes which have been used add significantly to the weight of the turntables themselves and tolerances between moving and static parts are often minimal (only 6mm in some cases) to ensure that sound transmission routes are not available. The tall rear wall rotates within a special acoustically-treated soffit in the ceiling to ensure there is no sound transmission route over the top of the wall.

Edinburgh-based Northern Light were involved in the specification and installation of the PA system and, as a result, the Pentland Auditorium features a Martin Audio sound system. This provides principal loudspeaker coverage from above and to the sides of the proscenium using a two-way system comprising EM105s and EM75s, with additional delayed secondary clusters of further EM75s which provide coverage to the rear of the auditorium. Installed in the Sidlaw and Fintry auditoria are Martin Audio EM15s and EM75s which have been specially veneered in American Cherry to match the walls. A Soundcraft SR32 console is installed in the main auditorium, with the other auditoriums, breakout rooms and exhibition hall each being covered by an SR 16 console. MC² amplifiers and Furman signal processing equipment is also used in the auditoria.

Northern Light also carried out the lighting installation for the centre, consisting of a combination of Strand and Teatro equipment. In control of the main auditorium lighting rig is a Strand 430 console, covering an assortment of Strand's Cantata range of Fresnels and profiles, complemented by Teatro Par cans and followspots. The lighting rigs in the two revolving auditoria are covered by Strand GSX50 consoles, with another two GSX50s and a GSX125 covering the breakout rooms. The exhibition hall lighting is also controlled by a GSX125.

Since opening, the EICC - probably the largest conference centre of its kind in the world - has already played host to LAN 95, the Bank of Scotland Tercentenary Celebrations and the annual general meeting of the Royal College of Nursing.

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- Narrow/wide fresnel or PC optics
- Silent cooling system, with thermal switch

FLY

Clay Paky in Concert with UK Bands



A spectacular stage set with numerous moving pieces designed by Dave Byars and Robin Murray set the scene for Blur's latest tour.

The large generic rig includes eight Clay Paky Golden Scan HPEs and eight Golden Scan 3s. The HPEs were used to project a selection of customised effects including 'Blur' logos, and a superimposed spyrograph space ship.

Lighting designer Dave Byars designed the show, with Andy Emmerson in control of the moving lights using a Flying Pig Systems

WholeHog II. The lighting production for the whole tour was supplied by Entec.

Byars also lit Pulp's recent tour using Clay Paky luminaires. Six Golden Scan 3s and four Golden Scan HPEs provided an array of single colour and projection effects to complement a retro-style set and show for Pulp at Brixton Academy.

Phydeaux McAvoy operated the show from an Avolites Sapphire, and the lighting production was also supplied by Entec.

Pictured above: Blur at Wembley.

CT Vision Inc

Creative Technology, the London-based video production services company, recently launched CT Vision Inc, a US operation headquartered in San Francisco.

Run by Charlie Whittock, a project manager with Creative Technology for eight years, the company handles all types of projects in the corporate communication, broadcast and entertainment industries.

Whittock told L+SI: "The main function of the US office is to support American producers coming to Europe although, conversely, there has been tremendous demand from UK producers operating in the US. In fact, projects to date have been evenly split between the two."

CT Vision offers a point of contact for American producers who wish to take advantage of CT London's services when staging events across Europe.

White Book

The 1996 edition of the White Book is now available. The directory of artists, performers, services and facilities for the special events, entertainment and media industries is once again accompanied by the Little White Book, a comprehensive pocket-size reference of every UK entry's telephone and fax number.

For further information, telephone (01932) 572622.





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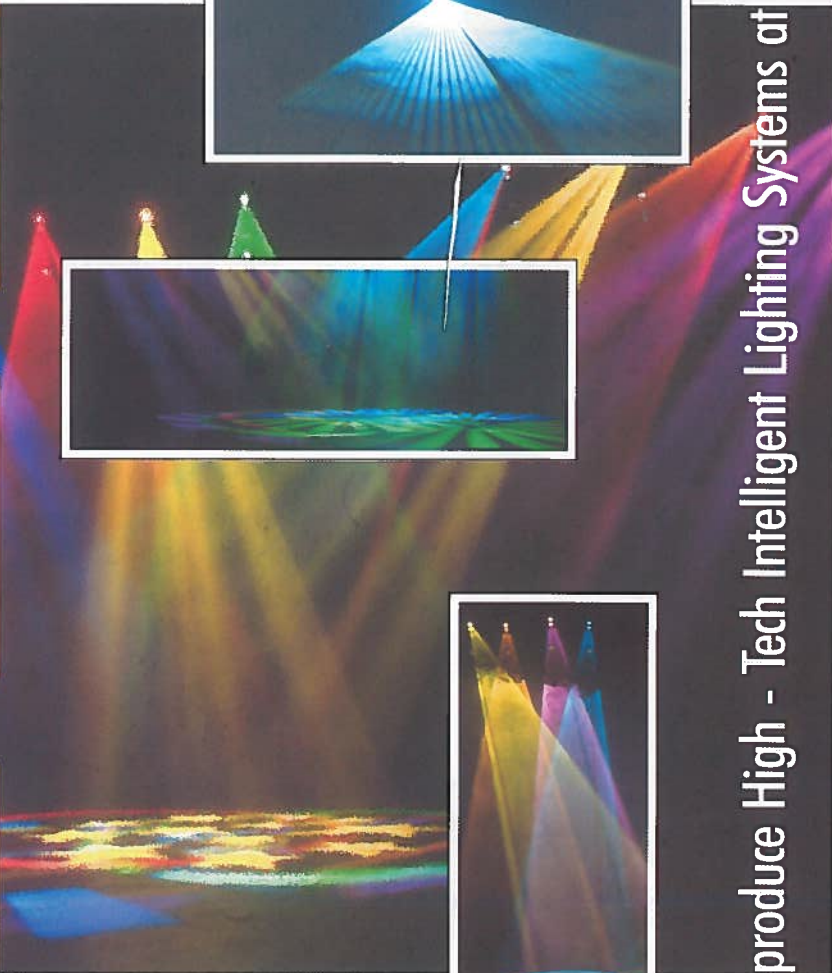
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APRS' Audio 96

The Association of Professional Recording Services (APRS) has announced a high profile promotional campaign for its annual London exhibition, Audio 96, which will take place from 19th-21st June 1996 in the National Hall, Olympia. A full range of professional audio will be represented, encompassing broadcast, post-production, recording, project studios and new media.

A new feature for 1996 is the introduction of specialist feature and demonstration areas, designed to provide visitors with an objective insight into the operational reality of different audio working environments. The Briefings and Workshop programme is once again being run in parallel with the exhibition, and following two principal streams: one will comprise interactive sessions with a strong hands-on element, whilst the other stream will embrace more advanced topical technical issues, with a major emphasis on multi-media applications, converging technologies and digital domain developments.

For further information contact the APRS in Reading, telephone (01734) 756218.

Blackout Have it Covered

Blackout's theatrical drapes have been in use recently in such diverse settings as the Sandhurst Military Academy Ball and Cirque du Soleil's Saltimbanco shows at the Royal Albert Hall (see L+SI, January 1996).

The company has recently supplied a huge starcloth to GDC, which organises the Sandhurst Balls, which was used to transform one of the sports halls into an impressive nightclub. Cirque du Soleil, the production company for Saltimbanco, has also recently used a huge wall of drapes to screen off part of the stage. This created a technical area, as well as a warm-up zone for the artistes to await their cues.

Blackout has also supplied the Science Museum with all the backdrop drapes for the Star Trek exhibition (see feature this issue).

Busy Mushroom

Mushroom Lighting have reported a busy 12 month period, during which they have set up new facilities near London's Tower Bridge and also in Lille, France.

The past year has seen the company working on displays for companies at the London Motor Show, various fashion exhibitions and a number of major international product launches at all of the country's principal exhibition and conference centres. They have also staged open-air balls in Oxford, the Live! Awards in London, and provided trussing and lighting equipment for the main stage of the Outdoor Event Exhibition at Wembley. Most recently, Mushroom produced the sound and lighting for the main stage and catwalk at the Wedding Show, held at London's Olympia.

Theatre Directory

The 1996 edition of the British Theatre Directory is now available.

The volume contains full administration and technical details for theatres, concert venues, arenas and exhibition halls, listings of agents and promoters, theatrical TV and radio production companies, event organisers and media and public relations, as well as contact details for a comprehensive array of lighting, sound, staging and accessory suppliers.

For details contact Richmond House Publishing on 0171 437 9556.

Scaggs Opts for BSS

Slim's nightclub in San Francisco, owned by veteran recording artiste Boz Scaggs, underwent a major sound system upgrade at the end of last year, and following evaluations by Scaggs' own team of engineers, components from BSS Audio, JBL Professional and Soundcraft were chosen.

At the heart of the system is a 40-input Soundcraft Vienna console, with a pair each of main cabinets and sub-cabinets from the JBL Array series of loudspeakers. All power amplifiers - JBL 300, 600 and 1200 series models with 8,000W for the mains and 10,000W for the complex monitor system, which also uses JBL 4793 monitor cabinets - are controlled by BSS's Omnidrive loudspeaker management system. In addition, five BSS 960 stereo equalisers define the sound, and BSS 318 crossovers are on every power amp.

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Scottish Lighting Show

BBC Resources Scotland, in association with Scottish Broadcast and Film Training Ltd and PLASA, played host to the first ever lighting exhibition and seminar programme at its studios in Glasgow. Visitors to the exhibition, which totalled just under 300, were offered a rare opportunity to see and try, on their own doorstep, the latest lighting equipment available.

The exhibition, organised by Joe Breslin and his team at BBC Resources, attracted support from a number of companies and organisations who recognise the potential of the regional market, including Cirro-Lite, M&M, Blacklight, Lee Lighting, Total Quality Lighting, DeSisti, Lxtrics Theatre Supplies, Arri, CP Engineering, I-Light, Strand, Northern Light, Optex, Vari-Lite and Stagetec. Trade associations PLASA, ABTT and SBTFF all had a presence at the show.

Though the visitor count was not high, and the appalling weather conditions didn't help matters, most exhibitors were pleased with the turn-out and welcomed the opportunity to take their products and services to Scotland. Despite the obvious advantages offered by London and Birmingham, there is something to be said for more regional shows and BBC Resources is to be congratulated for providing a platform for the industry to meet together away from London. PLASA's presence at the show underlined its determination to have a higher profile across the country, and whilst the growing international stature of the PLASA Show will keep it in London, the Association is looking at ways to involve the regions in its development and expansion of the show, and indeed of the wider activities of PLASA.

Running alongside the trade show was an extremely well-attended two-day seminar programme covering lighting techniques and equipment which included presentations by Dedo Weingright on Dedo Lights, David Hersey on Digital Light Curtains, Rick Fisher on theatre lighting and Mark Kenyon and Andy Dobbs from the BBC on television lighting.

Joe Breslin and his team at BBC Resources plan to capitalise on this encouraging start and are looking at the possibility of running the show on alternate years.

People in the News

Sue Webb has left her role as product and restructuring manager with Harman Audio following restructuring within the Harman Group.

Atapco Security and Communications Ltd have confirmed that **Brian Evans** will be implementing his planned retirement at the end of February when he relinquishes his position as managing director of Millbank Electronics.

Ken Cation who is president of the American Atapco Security and Communications Group will take up the position of chief executive of Millbank. Both **Al Schaffer** and **Charlie Fink**, senior group executives, will be providing further support, and **Sue Pedley** has been appointed general manager of Millbank Electronics.

Trade distribution company Coe Tech Ltd have made new staff appointments following their busiest period ever. **Dale Bradshaw** maintains the 'Man in the Van' service to dealers and retailers across the country and **Simon Brown** joins the special projects department with an emphasis on sound products. **Clair Howard** has also joined Coe Tech and will liaise with visitors to the company's showroom in Northampton.

Following a very successful 1995, Screenco are expanding, with the appointment of **Stuart Young** as operations manager, and the return of **Graham Filmer** as business development manager.

Young joins Screenco from Show Presentation Services where he was project and accounts manager. He will be responsible for the day-to-day management of equipment and staff resources. Filmer's responsibilities at Screenco include the development of new markets and incorporating new marketing strategies.

Wadsworth Electronics has appointed **Robert Hazlem** as technical sales representative covering the audio and broadcast industry. He joins Wadsworth from Future Electronics, where he spent two years as account manager, gaining experience in the electronic component distribution market. Hazlem will be responsible for servicing existing customers and developing business in the audio and broadcast market.



Stewart Young.



Graham Filmer.

KEF Audio (UK) Ltd has formed a new division devoted specifically to the development of the custom installation and commercial markets. Commencing operations in early March, the new division will be headed up by **Bernard Van Leer** and **Mark Knight**, both of whom have experience in audio and video installation with Van Leer's UK-based installation and distribution company, Speakers Corner.

Mark Ravenhill has joined AC Lighting as a technical consultant to aid customers with their choice of computerised lighting control system. Ravenhill, previously with Martin Professional, will be a key part in the promotion of the Jands, WYSIWYG and Wholehog II lighting control systems distributed by AC.

Stagetec have appointed **Stuart Peach** as sales engineer to help with their rapidly increasing workload. He will assist on the sales and marketing side of the business.

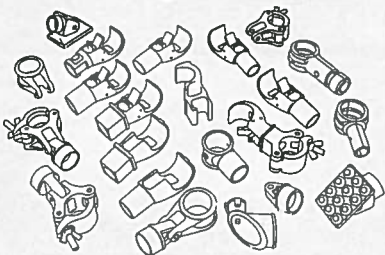
Harmer Public Relations have appointed **Erica Beresford** as account executive. Her responsibilities will include the day-to-day running of the consumer accounts.

Glen Becker, president of Grand Stage Lighting in Chicago, became the first recipient of the Recognition Award presented by the Entertainment Services and Technology Association (ESTA) at its annual meeting held in Miami Beach, Florida.

Chris Watts has resigned from Irideon to begin work as a freelance lighting designer and production electrician. Watts, who is secretary of the Association of Lighting Designers (ALD), can now be contacted by telephone on (01582) 619310.

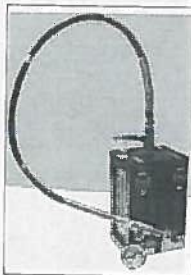
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The Brit Awards, by a Miracle . . .

If the Brit Awards were given, as their name might suggest, for valour in the service of the country, then the commendation for this year's show should read: "Never, in the field of human concert, has so much been owed by so many to so few." And I'm not referring to the little fracas involving a man who models himself on Christ re-incarnate. All that needs to be said on that matter is thank God for Jarvis Cocker, or our lord JC as he shall henceforth be known No: having closely questioned the 'few' who were engaged in the equipping and staging of this event, there appears only one comment worthy of its biblical association - a miracle! The move from Alexandra Palace to central London was unavoidable, as production manager Mick Kluczinski said: "The show had literally outgrown the building." The logistical nightmare it thus precipitated was unfortunately unavoidable. The biggest event in the calendar of the British music industry - the third biggest foreign currency earning business in Britain - came close to ruin when three days were pruned off the previous year's fit-up time because Earls Court's busy schedule didn't allow for it.

Robbie McGrath, visiting sound engineer for Simply Red, was scathing: "In the 20 years I've been in the business it's the closest I've come to seeing a live TV broadcast crashing and burning. If this was for some small charity show down the road you could live with it, but for an event where the music business is giving itself a pat on the back . . . well, I give it nil points."

Tim Norman from Edwin Shirley stages was equally critical, if a little more tempered in his comments: "The show was much bigger than last year at Ally Pally - 40 per cent bigger, in terms of equipment." Edwin's put in a huge tiered platform system for the seating and the tables, some 1,600 decking sections, enough for five large outdoor rock and roll stages, as well as the main stage. However, they only managed it by running two 40-man crews round five consecutive 12-hour shifts. Brilliant Stages supplied 23 rolling risers from their rental stock.

Paul Weber from Entec has long been associated with running the whole lighting operation for the event. After several successful years in the role, even his breadth of experience couldn't breach the gap. He explained: "The whole system grew but they gave us much less time. Losing three whole days was a very dangerous thing to do." The lighting designer for the event, Mike Sutcliffe (with Patrick Woodroffe given the task of lighting Michael Jackson), specified a full range of equipment including 53 VL2C spots, 72 VL5s and six VL4 wash luminaires from Vari-Lite, 44 Icons from LSD, 14 of the new Martin PAL moving mirror lights, 68 Martin Robocolors, 300 Pars, 50 Groundrows and 12 followspots. Running this mammoth rig were seven board operators using dedicated Artisan, Icon and Martin desks, alongside a Compulite Animator.

Outside the lights in the sky were provided by Theatre Projects and included two Sky-Art 4kW xenon searchlights and two Sky-Tracker 2kW moving multibeam searchlights.

LSD's Mickey Curbishley, just one of the four moving light suppliers, commented: "Paul Weber might have been pulling his hair out but, having been at the show, I can say it looked fabulous."

Derrick Zieba from Dimension Audio (sound designer for the third year running), undoubtedly suffered most from the time constraints. "When we came in on Friday, everyone else was behind and we could only hang the centre PA cluster. When we returned on Saturday morning the stage had changed size (to accommodate you know who), and the cluster had to be completely re-hung. By Sunday morning's band rehearsals we were reduced to fire-fighting with every sound system plan compromised. Half an hour before show-time over 50% of our radio mic system was suddenly rendered unusable by the influx of 'the media' - who, I might say, had all been sent technical specifications on the wavebands we would be using - in the end a lot of very experienced people were made to look like amateurs."

I leave the last word to Mick Kluczinski: "In the final analysis, we pulled it off, but it was the hardest show I have ever done. We all knew it was going to be tight." Let's hope next year's venue has some extra days free; reputations are too easily broken on the back of such beasts.

Steve Moles

Cars, Computers & Crisps

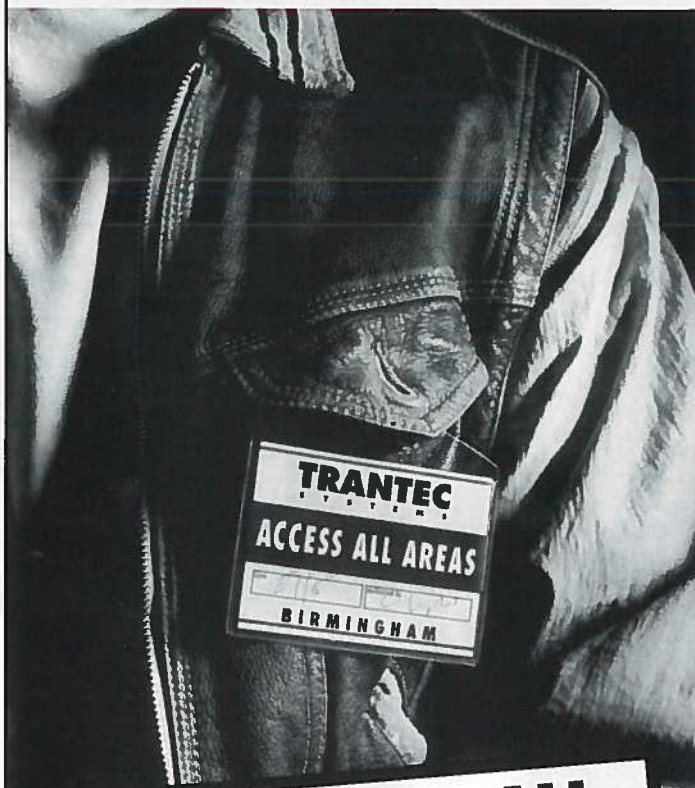
Blackout has recently supplied equipment for a number of major corporate events including Peugeot and Escom product launches and a Walkers Snack Foods management conference.

Immedia, which organised the recent launch show of the Peugeot 406 at the NEC, used some 550 metres of drapes from the company, whilst Marritz Communications invested in Blackout equipment for the Escom computer product launch staged at Chateau Impney at Droitwich where Blackout created the stage surround and starcloth backdrop.

Meanwhile, Link Communications also called on Blackout for the Walkers conference, where the company created a special auditorium inside a warehouse at the Royal Victoria Dock, supplying trussing, drapes and tracking.

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USITT 96

The USITT Annual Conference & Stage Expo will be held from March 13-16 at the Tarrant County Convention Center and Raddison Plaza Hotel, Fort Worth, Texas. Over 3,500 participants will assemble for workshops, seminars and round table discussions, and view exhibits of the latest products and services in performing arts technology.

The Professional Development Workshops provide intensive, one and two-day sessions on a wide range of topics including Intelligent Fixtures, Publishing on The World Wide Web and a Chain Hoist Maintenance School.

With 90 exhibitors already signed up, Stage Expo will include products and services from manufacturers, suppliers, dealers and schools in performing arts technology from across North America, and there will also be a presentation of brand new products and services at the New Products Showcase.

For further details contact USITT in New York, telephone (1) 212 924 9088.

ARX for South Africa

The Audio Distribution Company, based in Johannesburg, have been appointed by ARX as their exclusive distributor for South Africa. The company is run by Simon Oates and will concentrate on distribution and service support for pro-audio products.

BSS Sales

BSS Audio have reported a number of sales of their Omnidrive and Varicurve units. Three Omnidrives have been installed in the house PA system at the Hollywood Bowl in Los Angeles, whilst A1 Audio, also in Los Angeles have added seven Omnidrives to their hire stock.

RG Jones have purchased a Varicurve FPC-900 remote controller from LMC Audio Systems for the latest production of La Boheme at the Royal Albert Hall, and in the Far East, Varicurve equalisers and the FPC-900 remote are touring with Les Miserables. SSE Hire are equipping the latest AC/DC tour, which is expected to run for 18 months, with six channels of Varicurve equaliser/analyser and two Omnidrives.

1996 Olivier Awards

During February the Grosvenor House Hotel hosted the presentation ceremony by the Society of London Theatres for the 1996 Olivier Awards (see Awards in the Stalls, page 41).

The main talking point after this year's ceremony was the triumph of Judi Dench who, in a first for the awards, scooped the Best Actress and Best Actress in a Musical awards for her roles in *Absolute Hell* and *A Little Night Music*. The Best Actor in a Musical award went to Adrian Lester and the Best Supporting Performer in a Musical to Sheila Gish for their performances in *Company*, with Sam Mendes winning the Best Director category for his work on both *Company* and *The Glass Menagerie*. In the technical categories, John Napier's set for *Burning Blue* (L&SI September 1995) beat competition from John Gunter, Rob Howell and Anthony Ward, though Ward did pick up the Best Costume Design award. The Best Lighting Design category saw nominations for Chris Parry, Peter Mumford and Mark Henderson, with the award going to David Hersey for *Twelfth Night*, *Burning Blue* and *The Glass Menagerie*.

Other awards went to David Hare's *Skylight*, selected as Best New Play, *Jolson* as Best New Musical, the Royal Opera House's *Billy Budd* as Best Opera, AMP's *Swan Lake* as Best Dance Production, *Alex Jennings* as Best Actor in a Play and to Siobhan Davies for Outstanding Achievement in Dance and Bernard Haitink for Outstanding Achievement in Opera. Harold Pinter was presented with a special award for his lifetime's work.

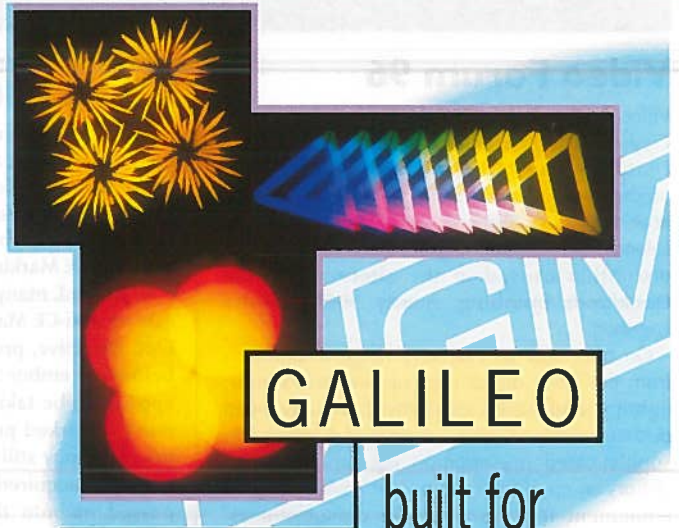
In the Straits

Texas-based Dallas Backup is supplying sound and lighting equipment for the current US tour of country singer George Strait.

Lighting designer Stacey LaBarbera has increased the number of Cyberlight automated lighting fixtures from 12 on the past tour, to 32 on this show; 24 Cyberlights are up in the rig, interspersed with 32 Dataflash xenon strobes, whilst eight Cyberlights are on the floor - two units in each corner. From this position, the Cyberlights project designs from the line of LithoPatterns gobos, onto the underside of a white scrim stretched across the top of the truss.

Also on the lighting rig are 40 Wybron Colorams, 16 ETC Source Four Lekos, 96 ETC Source Four Par cans and four Thomas 8-lights.

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Video Forum 96

Video Forum returned to Wembley Conference Centre in February for the fourth consecutive year. Featuring the latest in production, post-production and presentation equipment, it has now firmly established itself on the exhibition calendar, and despite security alerts following the disruption caused in the aftermath of the Docklands bombing, nearly 3000 visitors attended.

On offer was an extensive range of products from the latest digital cameras and accessories, lighting and audio equipment, to advanced desk-top video solutions, dedicated graphics and sophisticated presentation equipment, giving visitors an opportunity to try out a wide range of equipment from around 150 manufacturers, including Sony, JVC and Panasonic.

Next year's show will once again be held at Wembley (18th-20th February, 97) and will be one of the few opportunities in the UK to see much of the new product launched at NAB and IBC this year. Further details are available from VCM Communications on (01273) 857800.

World Lighting Fair

Some confusion has arisen over the exact location of the forthcoming World Lighting Fair. The organisers have asked L+SI to make clear that the 1996 Show will be held in Yokohama at the Pacifico Yokohama Exhibition Centre, which is situated in the Metropolitan area of Tokyo. The show will run from 20-22 June and further details can be obtained from the organisers, Sogo Butai in Tokyo on +81 3 3706 2001.

CE Marking: Norway

News has reached L+SI that the Norwegian government appears to be taking CE Marking even more seriously than the European Economic Community. Although not in the EEC, Norway is a member of EFTA, which has agreed to adopt CE Marking under the EMC Directive.

At present, many EC countries still permit the sale of non-CE Marked product subject to the EMC Directive, providing it was manufactured before December 31st, 1995. Norway, however, appears to be taking a stronger line. Although non-CE Marked product manufactured before this date may still be used by the person who originally acquired it, such product may not be passed on into the supply chain. It is also believed to be illegal for an end-user to purchase a non-CE Marked product in Norway, especially where it is intended for theatre, discotheque or educational use.

PLASA standards officer, Tony Douglas-Beveridge, commented: "The implication of this news is that stock subject to the EMC Directive manufactured prior to December 31st, 1995 cannot be sold to Norway unless it has been correctly CE Marked. The UK position on non-compliant stock was detailed in Issue 58 of Standards News, but the existence of differing views in other EC countries was also highlighted. I strongly advise that, before shipping such product for the first time in any EEC or EFTA country, CE Marking requirements should be checked with the relevant national regulatory authority."

Eddie Hunter

The Theatre lost a great talent in January when Eddie Hunter died suddenly, in his sleep, whilst on holiday in Australia.

For the many who knew or worked with him, his loss will be deeply felt. His uncanny ability to interpret ideas and to transpose them into artistic reality was a natural talent that left one silent in admiration. From an early age, he proved an accomplished dancer, singer and musician. Discovering a passion for the theatre, he showed natural gifts as an actor and began to excel in costume and set design. Working in touring revue, he developed as a set designer and artist.

From Newman's Hire in Shepherd's Bush, he moved to CCT Theatre Lighting, first as a graphic artist, then later he became responsible for the purpose-built scenic workshop at the Charles Cryer Studio Theatre in Carshalton, Surrey.

Eddie was hopeless with money, possibly the sign of the true artist. Don Hindle of CCT recalls asking him what happened to an unaccounted for fiver on his expenses: "I embezzled it," was the disarming reply. Eddie's biggest fault was his lack of ambition, a constant source of frustration to his friends, for whom he was a warm and generous host, and welcome guest. He was a loyal and unquestioning friend, and utterly without malice.

The celebration of Eddie's life took place at Beddington Church. A party at the Charles Cryer Theatre followed. It was a great do - Eddie would have loved every minute.

Graham Fathers, AJS



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AWARDS IN THE STALLS



Les Enfants du Paradis at le Barbican.

photo: Nobby Clark

It's that time again - prize-giving at St Solts. For once the Society of London Theatre's 1995 Olivier Awards have been matched to the calendar year, so no late arrivals crept under the wire. (The squelch of goalposts being shifted for the Standard awards each autumn has become almost deafening).

The Oliviers are the one bunch of awards that pay full regard to the design side, separating sets from costumes and even honouring the lighting person. The set-costume split gives designers two bites at the cherry and lent an interesting subtext to the nominations this year, especially in the use of the Olivier theatre itself: Richard Hudson's haven't-we-been-here-before *Volpone* costumes got a nomination nod, but not his excellent panelled revolve, whilst Nicki Gillibrand was on the costume list for *Night Music*, but not Ashley Martin-Davies's overwrought balconies and gauzes.

In terms of design nominations it was one heck of a year for the National. Multi-nomination is the rule rather than the exception for busy designers, so there were 26 production mentions for the three awards on offer, though honour was satisfied in the fact that exactly 12 shows were involved. Of these, seven were NT shows (15 mentions) and five from outside. The RSC's *Twelfth Night* and *Midsummer Night's Dream* were up for all three categories, leaving only *Burning Blue* (sets and lighting), *Indian Ink* (lights) and *Glass Menagerie* (set and lights) to carry the banner for the West End proper.

How satisfying, then, for the 'commercial' outsiders that John Napier should carry off the set prize for *Burning Blue*, with David Hersey (referred to in one report as 'Dave' - which sounds like serious *lèse-majesté*) getting the lighting laurels for a hat-trick of *Blue*, *Menagerie* and *Twelfth Night*. I wouldn't want to quarrel with either of these winners, especially since my own choice for designer of the year, Anthony Ward, picked up the costume gong for the *Dream*, *Grande Magia* and his gloriously inventive *Way of the World*.

It's fitting that attention should be drawn to the big lift that was given to *Burning Blue*, already a fine play when seen at the King's

Head, by the importation of two top-class designers for its West End transfer. It's just a pity that such a good show should have lost out on the wider audience it deserved by acquiring

"The stage lighting designer has the unenviable task of creating the equivalent of the film cameraman's close-up, which ain't easy anywhere, least of all at the Barbican."

the tag of 'gay play'. Gay issues were indeed crucial to its plot, but here was an old-fashioned drama with much more general appeal which, thanks to Messrs Napier and Hersey, looked a stunner. (And if there were a sound design award, I reckon Nick Gilpin's screaming jets would have walked away with it.)

It's good, too, that the jury should have noticed the considerable contribution made by some cool Hersey blues to Rob Howell's fire-escape set for *Glass Menagerie*, an imaginative use for the Donmar Warehouse which Mark Thompson was able to borrow later for *Company*.

Hersey's competition included the usual suspects in Mark Henderson and Chris Parry, with Peter Mumford, a newer name, presenting a usefully varied portfolio in *Richard II*, *Volpone* and *Mother Courage*. I would have liked to have seen Alan Burrett on the list somewhere, with his RSC *Coriolanus*, just one of a number of his exciting plots in 1995. If it comes to that, Fran Thompson's French Revolution sets and costumes for that show would also have been on my short list. The absence of women from the lighting design nominees won't last much longer, either, with the likes of Paule Constable and Johanna Town knocking hard on the door.

While the Olivier panel have been handing out bouquets, my mates the critics have been handing out some fairly hefty brickbats to designers in recent weeks. *The Fields of Ambrosia*, an unassumingly enjoyable American musical seen all too briefly at the Aldwych, got it in the neck for just about everything. This says much more about the

hostility of London critics to anything unknown and foreign than about the show itself, which dared to apply black comedy to a musical. Sure it could have been improved: a local director and designer would have helped, for a start, rather than exposing the show's original team (from New Brunswick, NJ) to the harsh glare of London. But the producers were clever enough to bring in Deirdre Clancy (another of this year's Olivier names) to do the costumes, with Nick Richings providing some very acceptable lighting and Rick Clarke as reliable as ever on sound.

Where I think those who know their stage technology would part company with the critics is over the RSC's latest biggie, Simon Callow's stage version of the legendary film *Les Enfants du Paradis*. Perhaps it was over-ambitious of Callow to try and bring every moment of the film on to the Barbican stage - Marcel Carné had unlimited crowds, tons of locations and all the cachet of grainy black-and-white film stock to give film buffs the impression that his tiresomely stagey love-story was a movie masterpiece. Few of the critics seem to have noticed what miracles of scenic re-interpretation have brought almost the whole picture on to Robin Don's set. All that concerned them was that it took four-and-a-quarter hours to do so on press night - though even I'm relieved to hear that it's now half an hour shorter.

It's funny, isn't it? In Europe they sometimes seem to put length ahead of quality - last month I mentioned an Ariane Mnouchkine *Tartuffe* that weighed in at four-and-a-half hours; Peter Stein can hardly be bothered with anything less than five hours long, and there are plenty of other examples. Here, we get the fidgets after 45 minutes and the screaming ab-dabs after 90 without an interval.

At any rate, being forced to spend so long watching something they all reckoned they knew backwards from the video meant a more than usual concentration from the critics on the staging of *Enfants*, especially the lighting. LD Simon Corder's a friend of mine, so perhaps I'm prejudiced, but I thought he did very well on his first outing on the Barbican stage, coping with the need to show very varied 'realistic' and 'theatrical' states on the central three-storey revolve in which Robin had set much of the action, while creating plenty of atmosphere on the big open space that surrounded it.

There was a restraint and subtlety about his plotting that I liked a lot. The stage lighting designer has the unenviable task of creating the equivalent of the film cameraman's close-up, which ain't easy anywhere, least of all at the Barbican. The critics, who seldom have a word (good or otherwise) to say about lighting, piled in gleefully. One of them came up with the old adage 'if you can't be seen, you can't be heard'. There's some truth in this, but it's about as relevant to today's production styles as the suggestion that actors should always face front, preferably downstage centre.

A couple of weeks later, Corder lighting turned up again, this time very bright and hard-edged for Martin Crimp's equally bright and hard-edged *Misanthropy* at the Young Vic. I haven't noticed a single mention of the lighting this time. Perhaps that's the way it should be - the best compliment to any lighting designer is often critical silence.

Ian Herbert

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

SIDE BY SIDE BY SIDE

Robert Halliday reviews the enduring popularity of Stephen Sondheim, looking at *Passion*, *A Little Night Music* and *Company*

Stephen Sondheim is something of an enigma. He sprang to fame as the lyricist for the revolutionary 1957 musical *West Side Story* and then moved on to both composing and writing the lyrics for a stream of shows which have steadily altered the form of musical theatre, always been acclaimed by the critics, and yet have rarely become huge box-office hits. Somehow, unlike modern composers who will vanish after one flop, Sondheim has continued to write shows - winning the 1994 New York Tony award for his latest work, *Passion*.

Sondheim is most often compared with Andrew Lloyd Webber. In commercial terms, the comparison is a fascinating one: Lloyd Webber has been represented by at least two shows in the West End since *Evita* opened, whereas between the end of the run of *Sweeney Todd* in 1981 and a revival of *A Funny Thing Happened on the Way to the Forum* in 1986, there were no West End Sondheim productions. None of Sondheim's work has ever become one of the 'global musicals' - a *Phantom* or *Les Mis*, with productions cloned around the world. It took 16 years for his *Follies* to reach London from Broadway, and that was a new production which hasn't been seen since it closed at the Shaftesbury.

But the comparison is perhaps unfair, since Sondheim actually sits in a musical generation before Lloyd Webber, forming a direct lineage from the generation of Richard Rodgers and Oscar Hammerstein - with whom Sondheim served an apprenticeship early in his career - through the 'rock and roll' musical generation of which he has never been a part. And where Lloyd Webber's shows have tended to be created around spectacle - a small-scale, studio production of *Starlight Express* seems unlikely - Sondheim has generally preferred to tell stories of real people and the relationships they are involved in. Although not all enormous financial successes in their original productions, his works have stood up to re-examination, often in new forms that have shown them to better advantage and at times when audience taste has caught up with them.

At one extreme this has seen *Pacific Overtures* presented by English National Opera, and *Sunday in the Park with George* performed at the National Theatre. At the other, shows originally presented as large-scale productions in Broadway houses have been scaled down into smaller theatres where the people the shows are about dominate, rather than the scenery - a trend started with the *Side by Side* by Sondheim review and continued in revivals of *Sweeney Todd* at the Half Moon Theatre and the National's Cottesloe auditorium. It is interesting to speculate that *Follies* - which charts the relationships of ex-follies dancers at a reunion in their old theatre - could also benefit from such small-scale treatment, yet the setting it calls for - a large, empty old theatre full of ghosts - precludes such a production.

In the UK, the Sondheim fascination is currently running at something of a high, with productions of three of his works either in or on their way to London. First out of the starting gate were the National Theatre, who seem to



Stephen Sondheim's *A Little Night Music*.

photo: Michael le Poer Trench

have adopted Sondheim as a serious author whose work they can mount without the criticism they'd receive if they put on a production of, say, *Oliver!* - and did receive, to some extent, with *Carousel*, though that production, currently setting off on a new tour of America, could be counted as a historic piece. Following their productions of *Sunday in the Park with George* and *Sweeney Todd* they are now presenting *A Little Night Music*. Based on a film by Ingmar Bergman, the show was first presented on Broadway in 1973, running for 601 performances over 17 months - which seems nothing compared to modern epics, but which was a respectable run then, and welcomed by the composer after the \$800,000 lost by *Follies* two years earlier. The show follows several inter-mingled relationships - Frederick Egerman, a lawyer who has recently re-married to a teenage bride Anne, meets an old flame, the actress Desiree Amrfeldt and re-kindles the relationship, so becoming involved with her current lover and his wife. The first half of the show sets up the relationships, while the second act has all of the participants gathering at Desiree's mother's country estate and follows the events through one summer's evening, culminating in one of Sondheim's best known songs, 'Send in the Clowns'.

With the show appearing in the National's large Olivier auditorium, director Sean Mathias and set designer Stephen Brimson Lewis clearly couldn't take the small-scale approach, but that approach wouldn't necessarily be right for this show, especially in the exterior scenes in the country estate. Instead, they have boldly used the full Olivier stage and more, extending into the scene dock behind the stage area for a distant lake in the country scenes. And for much of the show, they leave it empty.

The only permanent settings are a curved

unit on either side of the stage, which follow the curve of the Olivier's auditorium and to some extent are even textured to resemble the theatre's concrete walls, though the texturing is softer and in a gentle lavender colour. The stepped stage-left section houses the 15-piece band, and then curves round to a long cantilevered point housing a fake piano at which characters from the show sometimes sit; stage right is a balcony used to represent a theatre auditorium at one point, and also, frequently, as a location for the shows 'observer' characters. The rest of the stage floor is carpeted, again in a pale lavender colour intended to evoke Scandinavian summer evenings - but also partially reflecting the colour of the theatre's seats.

However, the curves of the side sections also follow a circular line in the carpet - which marks the edge of the Olivier's drum revolve. Originally conceived as a way of allowing rapid scene changes without scenery having to be carried or wheeled long distances onto the theatre's open stage, the revolve's elevator did not see active duty in a show for over 10 years after the building opened, but has been kept busy ever since its debut in William Dudley's design for *The Shaughraun*. Here it is used both as a large revolve when the stage is empty of scenery, and to lift a set of rooms and corridors up to stage level - these consist of sliding walls which are rearranged to form Egerman's bedroom with roof terrace above, or the rooms of Desiree's digs. The only minor problem with its use here is that, because there is no scenery in front of the lowered half of the revolve during scene changes, the audience in the circle get a great view of a gaping hole in the floor, with actors navigating nervously around it! Remarkably though, given the time taken to commission the revolve, Olivier production manager Annie Gosney now describes it as a

very reliable piece of equipment.

Unlike some earlier National musicals, which have displaced the usual repertoire system to take up permanent residence for a few months, Gosney had to deal with fitting *Night Music* into the rep, and into a standard Olivier budget. The high-tech of the Olivier's machinery is thus counter-balanced by the low-tech, and so low-cost, machinery elsewhere. The huge drapes which seal off the upstage area are opened and closed using manual winches, with deads taken using mechanical revolution counters, for example. And even the Olivier's technology isn't as hi-tech as it sometimes appears, since both the power-flying system and drum revolve are still largely running on their original, mid-seventies control systems. Gosney is hoping that lottery money will finally allow these control systems to be updated. In the meantime, the largest difficulty comes from the fact that the revolve and flying controls aren't interconnected, meaning that the cues where a flown piece has to land on a rising revolve, or lift fractionally to allow the revolve to turn under it, had to be carefully co-ordinated.

Gosney is also very proud of the huge chandelier, which forms a centre-piece of the show. With the budget running out it didn't look as if there would be enough left for this piece - and the final version is a low-cost one made from a metal frame, vac-form and some glass chandelier 'diamonds'. The result - first seen only hazily through a semi-circular gauze 'tunnel' in the show's preset, then fully revealed as the gauze flies out - is stunning.

Defining the mood of the show even at this early stage is the lighting of Mark Henderson, a veteran of the London production of *Follies* for which he produced a wonderful design. In the preset here he colours the gauze deep blue, then shoots a moon gobo through the gauze and the chandelier. And where the set design extends the Olivier's auditorium onto the stage, the lighting takes the mood of the show out into the auditorium, replacing the usual houselights on the side walls with cloud gobos.

Once the show is underway, it is the lighting that is called upon to do much of the defining of both stage areas and mood in the huge empty space. For mood, Henderson uses a wide colour palette, from deep blues and lavenders to lavender tints, often switching between them even in the course of a song, and on through a selection of deep ambers for the end of the summer day in act two; the ambers come from low side-lighting positions, casting the long shadows of evening while matching the mood described in Sondheim's lyrics, 'the sun sinks low/diffusing its usual glow'.

He also uses a selection of soft-focused cloud gobos around the edge of the revolve, providing irregular white light for the characters to parade through. For focusing light to characters, he is helped both by soft-edge followspots from the



Judi Dench takes the lead in *A Little Night Music*.

photo: Mark Douet

theatre's high side-lighting positions, and by the Strand PALS automated lighting system that the National have been using for some time. They have the automated yokes fitted to PCs topped with scrollers, with four units on the side-lighting booms that have now been restored to use after several years of being forced under cover because of directorial prejudice, and several more flown on short bars over the downstage area.

The success of Henderson's design is that it takes a series of difficult problems and seemingly solves them all with a minimum of fuss - though the work required to reach those solutions must have been considerable, especially given the tight time-schedules the National works to, with just a week to get a new show into the rep. The sound design for the show, by Paul Groothuis and Jonathan Suffolk, is a similar measure of triumph over adversity. The problems in their case were the Olivier's notoriously difficult acoustics, the presence of the band on the stage, and the limited number of channels on the mixing desk. Fortunately, one thing was on their side - the new sound installation in the theatre, described by Mike Walker in the May 1995 issue of *L+SI*, consisting of a mixture of Tannoy S300s and Meyer MSL-2s and 650-R2s. Walker's installation also added cabling for front-fill loudspeakers on the front edge of the stage, which is being put to use on the show with a fill system split to give separate control over the centre and side sets of loudspeakers. The designers also added pairs of Bose 101s to each of the theatre's four

lighting 'stalactites', as well as naked tweeters mounted on custom metal brackets attached to the lighting bar that runs around the front of the circle to lift the vocals for the audience in the circle - at least on the evenings when they don't drape their coats over the speakers!

The Olivier's mixing desk is a Cadac E-type with automated routing, which Groothuis loves for its remarkably low background noise levels and general reliability. Unfortunately, the desk wasn't large enough to cope with the band and 18 radio microphones, and the size of the mixing area at the rear of the stalls meant that adding another Cadac frame wasn't possible.

Yamaha's ProMix 01 mixer provided the solution; without the usual pile of control knobs it is very shallow and so could fit in at the side of the operator. Two 16-way desks were used to sub-mix the band, controlled by MIDI from the Cadac control software and feeding into two inputs on the main desk. Groothuis is very pleased with the desks, citing only minor noise problems which had no effect on *Night Music* because of the relatively low level the system was being driven at.

The designers' aim was to give vocal clarity to all areas of the theatre, while attempting to image the sound to the correct location on stage, and to keep everything sounding natural and

un-mic'd. To help achieve this over the full depth of the Olivier's stage, all of the cast are mic'd at all times (so that there are no awkward transitions) using a combination of house radio mics and extra sets hired from Autograph. Groothuis and Suffolk have divided the stage into seven delay areas, with cues in the Cadac controller re-setting delays to ensure that the amplified sound always seems to originate from its 'real' source.

The success of the sound on the show is due largely to the enormous amount of thought and experimentation that the NT sound staff have put into trying to crack this most difficult auditorium. *Night Music* is but one phase of this experimentation; the team recognise that it is not perfect, but their incremental improvements will continue with the planned revival of *Guys and Dolls* later in the year.

Of course, they are also helped by the quality of the ensemble cast, led by the Olivier-award winning Judi Dench, whose rendition of 'Send in the Clowns' is a heart-breaker. Were it not for the way its design is tied in with the Olivier's auditorium and mechanics, this sold-out show would look like a certain West-End transfer - instead, it has to settle for a National run that has just been extended through to the summer.

The quality of the cast is also the main strength of *Company*, which appeared across the river from the National, at the tiny Donmar Warehouse, last December - and which won Olivier awards for two of its cast (Adrian Lester and Sheila Gish) and its director, Sam Mendes. The production also re-united Mendes with Paul Pyant and John Leonard, the lighting and



Company at the Donmar Warehouse.

photo: Mark Douet

sound designers of his two previous Donmar musicals - *Cabaret* and *Sondheim's Assassins*.

This production is a clear example of the benefits that downsizing can bring to a Sondheim show. *Company* is a musical-comedy telling the story of Robert, a single New Yorker celebrating his 35th birthday surrounded by married friends, that was originally given the full treatment by director Harold Prince and choreographer Michael Bennett. In Mendes' re-conception of the show, which even seems to have won praise from the composer, the show is a dream taking place inside Robert's head.

Mark Thompson's design starts from a naturalistic viewpoint - Robert lives in a New York loft apartment, which is what the inside of the Donmar resembles anyway, and is made to resemble more closely by painting the back wall white and installing a metal walkway around the theatre's circle and across the centre of the stage. This walkway is a clear tribute to the success of Rob Howell's design for the Donmar's previous production, *The Glass Menagerie*, but the *Company* walkway is all-new, despite what some of the London critics might think!

Attached to the back wall is a large rectangle made up of many coloured plastic squares, which could be a piece of modern art sitting in the apartment, but is actually used to transmit 'messages' in the dream - the coloured squares can light up in a way which at first seems random but which, as the Donmar's chief electrician Stuart Crane explained, actually represents the different people and apartments in the show. How many of the audience understood this is unclear though!

The show's varying locations are much more strongly defined by Paul Pyant's lighting, which is a model of old-fashioned (in the best senses of the expression) simplicity. Venetian blind gobos from the side are quickly understood to define Robert's apartment, for example, while windows from front locate us in the apartment of one of his friends. The rest of the rig, formed from the Donmar's house stock of Strand equipment of a variety of ages, is used to provide the general cover and a wide assortment of tightly focused specials around the walkways and on the floor that isolate

characters at various moments of introspection. With the budget limited, the only 'toys' Pyant could bring in were 12 Rainbow scrollers provided by White Light and used atop Par cans for washes to the floor and back wall. Of course, these provide a greater colour choice throughout the show, but in the hectic number that opens act two they also allow snap colour changes to the beat of the music that would be impossible to do (or, at least, not nearly as effective given the delay of filament lag) by cross-fading lamps. This sequence sees Crane rattle off around 50 cues in just four minutes on the Donmar's Imagine 2 desk, many run manually on the chase masters that ETC have, sadly, removed from the current Imagine equivalent, the Expression. The show as a whole runs to over 200 cues, partly because with just one followspot (a vintage Strand 293, still putting in good service) Pyant has lots of cues to bring tight specials in and out which might have been the work of another two followspots on a larger production. In his more general lighting, Pyant is not afraid to hold back on lighting right out to the edges of the stage, seeming to prefer to keep the action contained as much as possible rather than spilling light off into the audience on the edges of the Donmar's tiny stage. The result is that, even in this small theatre with white walls and shiny chrome walkways, attention is always tightly focused on the action.

Whether that tight focus will remain when the show transfers to its larger West-End home remains to be seen. That production will see the development of a secret theory that Pyant and Crane seem to have: that the character Robert in the show is a lighting designer. In the Donmar production he has chrome Par cans lighting his spiral stair case and a beautiful old Patt 56 (borrowed from Guildhall, and cleaned-up by Stuart Crane) bolted to one wall. In the Albery, rather than mask the top of the set using borders, the apartment will be topped-out with a chrome lighting rig hanging on silver truss. Of course, assuming him to be a lighting designer also fits with the show's line about him never having much money...

The biggest disappointment of the production period seems to have occurred in

the sound department, where John Leonard had hoped that he might finally be able to move operator Fergus O'Hare from the upper control gallery to somewhere in the theatre where he might actually be able to hear what the audience were hearing.

The key to this was to have been, once again, Yamaha's automated ProMix desk, which could have sat with O'Hare in the stalls or circle and then triggered other MIDI devices located in other, less space-critical areas. Sadly, Leonard and production sound engineer John Owens couldn't get hold of a ProMix on time or within budget, so O'Hare returned to doing what Leonard calls "his usual excellent job of mixing by numbers" on the Donmar's Soundcraft Venue 24-channel desk. Budget limitations meant that radio-microphones were out of the question, so the sound is picked up from 11 float mics, mainly PZMs located around the front of the stage.

Lifting the vocals over the music thus required careful mixing and close co-ordination with MD Paddy Cunneen (also MD for *Night Music*) and the band, who were again located to the side of the stage. Leonard and O'Hare's easy familiarity with the building meant that every word of dialogue was successfully heard, though. Background effects - mainly of New York by day and night - and some of the keyboard sounds were replayed from an Akai S3200 sampler, using the direct-to-disk mode for the longer effects.

Two months after *Company* opened, what seems to be the 'Sondheim team' re-grouped in Plymouth to mount *Passion*; a mixture of people from both previous shows, the team included John Leonard, Mark Henderson and Jonathan Butterell (musical staging for *Company*). One person (apart from the composer!) even claims involvement with all three; sound engineer John Owens moved out of the National into the Donmar and then on to Plymouth!

The somewhat mixed reaction to *Passion* on Broadway - four Tony awards, but limited audiences - has led producer Bill Kenwright to create a completely new production. Being the canny producer he is, he cast a star with a strong musical background, but also plenty of fans who'd be willing to come and see him in anything - Michael Ball, along with acclaimed actress and singer Maria Friedman.

The story they have to tell is again about relationships, this time between a soldier, played by Ball, who is re-posted away from his married lover. He continues to correspond with her by letter but, in the meantime, slowly falls for his colonel's daughter, a sick, disfigured woman who has known no love. The show is a continuation of Sondheim's apparent move to merging dialogue and songs; unlike Lloyd Webber with *Aspects of Love* (which *Passion* often resembles in feel) the show is not through-sung. Dialogue is spoken but songs then lift naturally out of dialogue and have gentle themes rather than block-buster tunes.

With the show opening in Plymouth, then playing in Manchester and Nottingham before settling into London's Queen's Theatre, director Jeremy Sams and designer Paul Farnsworth had to create a fairly large-scale set, and the result,

built by the Plymouth Theatre Royal's workshops, is a visually stunning perspex creation, with back and side walls of rustic, autumnal golds and browns. Beyond the back wall is a cloud-painted cyclorama, and overhead are perspex arches which form a header to the set but also, at one point, drop in to form the low arches of a railway station. Two highly effective moments in the show are created simply using flying drapes - a huge mountain, created from a drape pulled out across the stage, and the disappearing bedroom at the end of the first scene. This has a bed downstage centre, and a large drape behind it. The audience expect the drape to fly and the bed to either track or be carried off, instead of which, it is attached to the drape and flies out with it!

Beyond that, most of the technology in the show comprises lengths of string attached to doors in the side walls, allowing them to be pulled open for exits and entrances; production carpenter Colin Small was very concerned about getting them clearly labelled so that the right length of string went back to the right door on tour!

However, the set also includes a custom truck drive unit created by Fred Carro. This is a small, square metal frame that can drive itself up and down a centre-stage track, stopping at deads set using metal strips in the track. The frame also contains a rotating top, so that scenery mounted on it (including, at various times, a bed and a wide table) can be moved to any position up and down stage and rotated to any angle, or spun continuously. Operated from controllers up-stage left, the device allows scenery to be set quickly to accurate positions without crew members having to search for tiny marks in dark scene changes.

The only problem with the set, as lighting designer Mark Henderson lamented, was that it made lighting the stage very difficult. Although he had won two narrow slots in the middle of the side walls from Paul Farnsworth and filled them with Minuettes, the side walls prevented both direct side-lighting and front-of-house lighting to the edges of the acting area while the headers and other flown pieces severely limited overhead lighting positions and angles. And although spoilt by the Plymouth Theatre Royal's comprehensive front-of-house lighting rig, he was also having to bear in mind the touring dates and the more limited rigging available at the Queen's. At the first public performance - reached after two days of incredibly hectic technical rehearsals and just one rushed dress-performance - he was still refining many of the lighting levels, but the concepts were clear. Lightpaint scrollers on 2k Fresnels behind the side walls allowed a huge range of variation in the autumnal colouring of those translucent panels, with further scrollers on Par cans and a double-stacked flood bar washing the cyc also allowing the mood of the sky to be altered. That variation allowed the set to take on the bright colouring of a ballroom, or the dark, sombre feel of a

mountain on a stormy night with equal ease. The rig, supplied by Playlight, is controlled from Plymouth's house dimmers and their new Galaxy Nova lighting desk, and production electrician Gerry Amies will use a similar set-up on the tour.

With larger venues, a larger budget and, no doubt, a star now more used to performing in large concert venues with all of the equipment that entails, John Leonard and engineer John Owens were using an Autograph-supplied system that was about as far from that installed in the Donmar as possible.

Based around a 49-input Cadac E-type desk with computerised VCA selection controlled by Matt McKenzie's software, inputs are received from 15 channels of Micron TX501 radio microphones and an Akai S3200 sampler, controlled from an Amiga running Richmond Sound Design's Stage Manager software. The sound is sent out through Amcron amplifiers to a selection of Meyer loudspeakers. Six UPA-1Cs form the proscenium vocal system, with a further two used upstage for effects. Six UM-1s are used for the central vocal cluster and on-stage foldback, with two USW-1s filling in the base and 24 UPMs used as delays to the stalls and two circles.

The 15-piece band, this time located in the orchestra pit, runs through a separate system, appearing from two MSL-2s on the proscenium. Owens is a big fan of these loudspeakers, demonstrating how cleanly they go loud by turning them up to what seemed like a reasonable volume, then talking at a normal - but now inaudible! - level. The design makes use of the Cadac's legendary low noise level by running the desk very hard, but keeping all of the amplifiers down at about 40 percent of their maximum level. The production is operated by Jill Rowley, with Nicole de Souza looking after the radio microphones.

The show posed two particular challenges on the radio-mic front. Firstly, Jeremy Sams had been annoyed by photos from the New York

production showing a cast with large 'lumps' on their foreheads, and didn't want any mics to be visible; Owens brought Julie Cole down from London to help with this. Secondly, in the opening moments of the show the soldier and his lover are seen naked in bed, singing, leaving the interesting problem of where to put the transmitter packs . . . Michael Ball's modesty made it easy to hide the pack under the loose-fitting shirt he ended up wearing, while the other pack found a home under a conveniently large wig. Smaller Sennheiser SK2012 packs were used for this scene.

Once again, Leonard and Owens have succeeded in producing a beautifully clear, natural sound; only two moments sound artificial, one being the opening sequence when the two characters are talking across each other's microphones, and the other a new 'star' number towards the end of act two when all the levels go up. This second moment is particularly jarring because it doesn't really fit in with the overall style of the show, and it will be interesting to see whether it survives the journey to London.

Indeed, it will be interesting to see how the show as a whole is received by audiences who already have two Sondheims of excellent quality to choose between, especially since many will prefer the tunes and humour of *Company* or *A Little Night Music* to *Passion* which seems to take itself too seriously, and to spread too many repetitive moments over too long. I suspect that it is a show the music of which would grow on you over time, but I also suspect that it is a show which, like *Company*, would benefit immeasurably from the small-scale treatment, with the central characters thrown into a sharper focus than is possible on the larger stage at Plymouth. *Company* took 25 years to make that transition. So, now that the Donmar Warehouse seems to have escaped the threat of closure, maybe you should catch *Passion* there in, oh, about 2021!



Michael Ball as Giorgio in *Passion*.

photo: Michael le Poer Trench

FEEDBACK!



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TANNOY

STAR ATTRACTION

Lee Baldock boldly goes to London's Science Museum to talk to the designers behind Star Trek: The Exhibition

The perennial attraction of sixties sci-fi series Star Trek has helped spawn a long string of feature films, TV off-shoots, jokes, impersonations and imitations, not to mention a novelty pop record and a bizarre sub-strata (I use the term in the kindest possible sense) of society, known as 'Trekkies', whose worlds have been far more severely affected by Kirk & Co than most.

The latest centre of the universe for these Trekkies, and an undeniable point of interest to almost every one else who remembers Star Trek fondly (if not fanatically), is London's Science Museum. Since the end of October, visitors have been steadily weaving their way through Star Trek: The Exhibition, which is under licence from Paramount Studios and touring the UK for three years, having already visited Edinburgh and Dublin.

The exhibition, held inside what was once the Science Museum's Glass and Plastics Gallery, has been designed by Henry Lowe and Dorian Eley of Unimede, and encompasses the many guises of Star Trek from the 'Classic' series of the sixties through to the nineties offspring - Star Trek: The Next Generation and Deep Space Nine - as well as the half a dozen cinematic outings. Here you can see James T. Kirk's uniform (one of, I presume), Bones' medical gizmos, Spock's portable cassette recorder-thingy (with which he analysed planets and the like), the original bridge of the USS Enterprise, latex masks of



The bridge of the USS Enterprise.

All photographs: Timothy Soar

Klingons and other characters from the various series and, of course, a phaser.

Dorian Eley showed me around the exhibition, together with James Wadsworth of Light Projects, a specialist in the display and exhibition lighting market, who was responsible for the lighting design and installation. Dorian explained that the aim had been to create a theatrical feel to the sets and

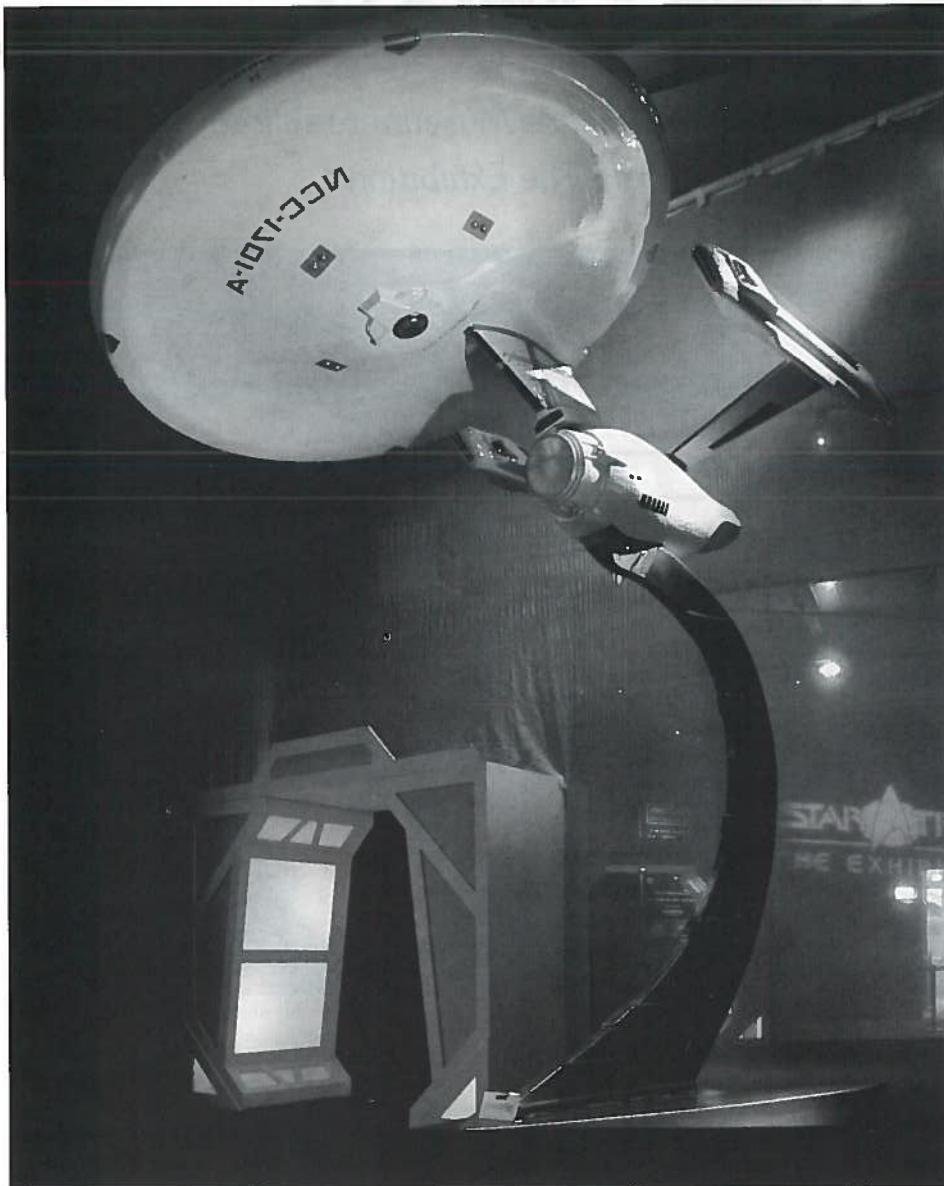
exhibits, and the use of star cloths (supplied by Playlight) to back the display areas works well to create this theatrical feel. The chronological elements of the exhibition, passing from the 1960s on to the various movies, to TV's Deep Space Nine and The Next Generation, are divided into separate areas by fine gauze screens (supplied by Blackout), and each area is linked to the next via 'airlock' doorways that

lead through the gauze. These very effective spaceship doorways are designed to separate each compartment, while offering a vista of what lies beyond, threading the exhibition together. The panels of the doorframes are lit from within, and a single egg strobe flashes on the underside of the frame.

The white gauze partitions are lit by Zero 88 profiles with DHA gobos and moving effects, while the display cabinets are highlighted by low-voltage Par 16 Birdies with integral transformers, which are run through Dyalite dimmers. Apart from the bridge set, the lighting is clean and mostly simple, save for the very clever use of the Dyalite dimmers every three minutes to pulse the lighting levels momentarily, à la temporary power failure on the Enterprise (you really feel for Scottie). The effect of this is almost subliminal, but adds a very great deal to the atmosphere of the whole. As James Wadsworth explained: "What we wanted to achieve with the lighting was a system that was as flexible as possible, without going too over-the-top, as we've found that we



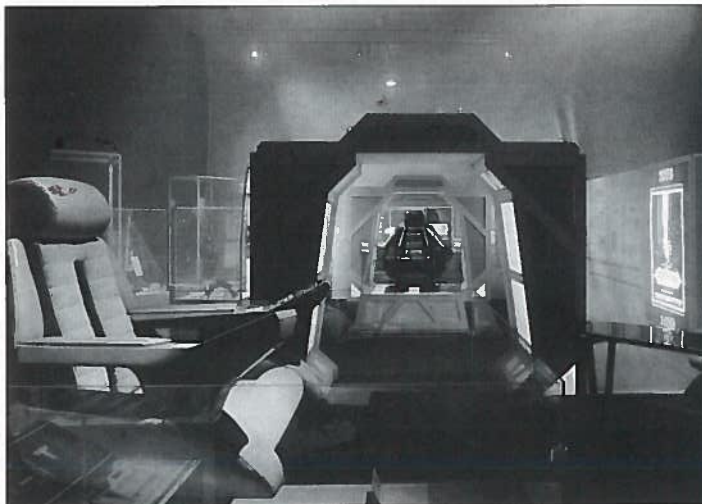
Pulsar's graphic shows how the Replay Unit controls lights, Dyalite dimmers and audio equipment.



One of many familiar sights that greet the visitor to the Star Trek exhibition.

risk upsetting the serious Trekkies. They might complain that it doesn't look right because it wasn't lit like that, or it was never that colour - you have to be so careful!"

The highlight of the exhibition, and the greatest chance of upsetting the Trekkies, is the bridge of the Enterprise (a sign on the Captain's seat reads 'Kirk Only - Do Not Touch'). This original set (which, at the risk of sounding like a Trekkie, is disappointingly small, but wonderfully familiar) is covered by a row of six Clay Paky Silverado 250W scanners, which are controlled, along with the soundtrack, via a Pulsar Masterpiece Replay Unit, which also controls the main display lighting and the pulsing Dyalite



A view through one of the 'airlock' doorways that link the displays.

dimmers.

Pulsar's Replay Unit, first shown at SIB in Rimini last year, is at the heart of the system, continually performing three simultaneous real-timed sequences. The cues are programmed via a Masterpiece 48 or 108 console, and this stored information is simply relayed to the Replay Unit using a memory card. For the bridge and transporter display areas, the Replay Unit cues the audio devices and then performs the two independent shows to an accuracy of one-fiftieth of a second.

The Silverados have their finest hour during the 'Red Alert' sequence when they kick into action - combined with the soundtrack - and scan the bridge quickly and erratically, so that the scene before the audience's eyes lacks only half a dozen actors demonstrating synchronised falling over. The Red Alert sequence is an effective cycle, used well with the sound effects, which effectively demonstrates the capability of the Replay Unit in this type of application, synchronously controlling a variety of media.

When not in Red Alert mode, the Silverados constantly light the bridge with slowly-moving circles of colour, which, although perhaps not technically part of the original interior decor, do not appear out of place. While (God forbid) this may upset the die-hard Trekkie, their presence is, in my view, essential, as they replace some of the magic that is lost with the absence of the TV medium. Without the colour and movement provided by the scanners, the set would remain looking, quite frankly, cheap and dated.

Another familiar set is the teleportation dais. Although at present this features two cardboard cut-outs, Dorian told me that there were still hopes to install a working Pepper's Ghost effect to produce the far more realistic, shimmering forms of the crew being 'beamed' to and fro.

The AV equipment was supplied free of charge by Pioneer, who sponsored the exhibition along with Pulsar. Two areas held Barco monitors, giving further

behind-the-scenes information by showing videos about the making of the various Star Trek programmes. One nice touch in this field was a looped film being projected onto a screen at the end of the 'Classic' section of the display, showing old newsreels from the 1960s, giving an interesting historical context to the original Star Trek series.

This month, the exhibition opens in Manchester, after which it will travel to Plymouth. The popularity of Star Trek is proving as strong as ever - around 160,000 visitors have seen the exhibition since the doors opened in London, a few of them, as witnessed by James Wadsworth, secretly sporting Star Trek uniforms under their long coats. Maximum warp factor, Mr. Sulu...



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SIEL 96

John Offord reports from Paris and the first big show of the season

The 1996 edition of SIEL had one major variation from previous shows: it was in a different hall - 7 rather than 3 - which resulted in you being presented with the event 'broadside on', so to speak. It meant the lazy journalist had to relocate the press office, grasp a coffee, take a look at the plan, and re-group for action. And be warned, as in year's past, that the first thing I do is draw a line through the sound area and club and DJ area (you'll get both more than adequately covered from Frankfurt and Rimini in our April issue). The end result was that I could concentrate on the central area of the hall, cover it neatly in two days, and have time for a couple of relaxed dinners.

It is encouraging to report that the integration of companies and their products into the international market place goes on. Compared to my early visits to this show, seven or eight years ago, when British companies were struggling for an identity and a decent distributor for the French-speaking market, things have moved steadily, if not dramatically onwards, and by-and-large, a structure has developed that sees the majority of international industry names present, albeit with some shuffling for territory and position.

As examples in the lighting field, **Pulsar** and **Clay Paky** have consolidated their position under the CP&P banner with their move to a base much nearer the capital; **Celco**, **Wybron**, **Thomas** and others are well-supported by **Sonoss**; **Rainbow**, **Rosco** and **Avolites** have **Dimatec**; **Cerebrum Lighting**, **Anytronics**, **Maris**, **Axiom** and **Andolite** have their base with **Durango**; **Teatro** and **MA Lighting** have **Galatec**, and so on. In reverse order, the creative French operations have established a base or distribution set-up in the UK and elsewhere, and in this direction, **RVE**, **ETC Audiovisual**, **Robert Juliat** and **Hardware for Xenon** are almost as well-known outside their own borders.

The major addition to the set-up was the first appearance on the scene of a totally new company, **ETTC**, who are **Electronic Theatre Control's** (ETC) French distributor. The new operation was set up by Bernard Bouchard, formerly of Strand Lighting France, and in addition to showing the range of ETC lighting



Matthieu Vulpillat (right) and Stéphane Colin of RVE with the company's newly launched lighting control console. Further technical details on this will appear in a company profile of RVE in our April issue.

control systems and luminaires, ETC also represents **Selecon** of New Zealand and the **Smoke Factory** from Germany. The company is literally just a few weeks old, but to have such a classy clutch of big names to start your life should be good news for all concerned. Jeremy Collins had travelled from New Zealand to promote Selecon's interests and ETC Europe had Adam Bennette and Mark Thompson present to usher them into the French market proper.

On the equipment front, ETC's new Express console, which was launched at LDI in Miami last November and carries many features from their high-end products, should become a very competitive desk, and according to Adam Bennette "shake up" the French market, where the

cultural structure runs deep and even the smallest community has its own *salle des fêtes*.

Heavyweights at SIEL, as always, included **ADB** from not-far-away Brussels and the company unveiled several new products, with after-show reports claiming the largest-ever number of genuine enquiries. The star was undoubtedly the new Europe DS105/205 range of 1kW and 2kW halogen zoom profiles with condenser optics, which general manager Mike Musso claimed feature a 40 per cent increase in efficiency compared with the existing 104/204 range which will now be phased out.

This dramatic change has been made possible by a re-design of the 104/204 optics coupled with the use of a new high-performance anti-reflex optical glass. "The user benefit is a spectacular increase of light output complemented by unique imaging characteristics which should please the most demanding lighting professionals," said Musso. "The improvement is such that, before specifying any standard 2kW profile, any sensible user should look first at the new ADB DS105 with a 1.2kW lamp in a comparative test. He may well conclude that it's close enough to take advantage of the 40 per cent saving in energy and investment cost, with the reduction in size and weight as a fringe benefit. If he still hesitates he won't resist the hard fact that the DS105 doesn't need a fan like many 2kW units!" On hand to back up ADB's claims for the new range came the announcement that they have just been awarded a contract for more than 700 luminaires for the new Royal Theatre - Teatro Royal - in Madrid, including an 'army' of DS profiles.



Bernard Bouchard, who heads up ETTC France.

On the control side, ADB unveiled Cantor 96, a 96-circuit version based on the same hardware as the highly successful and long-established Cantor 48, but with additional features such as optional monitor, colour change control, library storage on disk through a PC and an optional printer kit.

Swing 6 and Swing 12 are two brand new 6 and 12 channel (2 presets) manual control desks.



Pasquale Quadri, Enrico Caironi and Angelo Cavenati of Clay Paky with Bruno Souchaud (second left) of CP&P France.



ADB's new DS105 15-31 degree zoom profile yields 100 Lux at 16m and a 4.2m beam from a 1200W lamp.

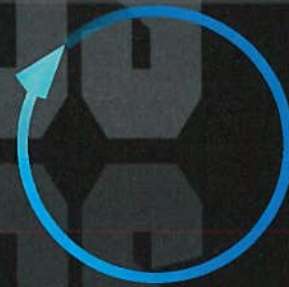
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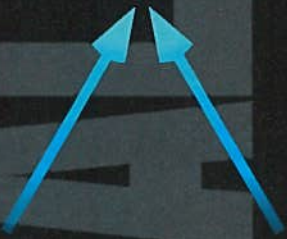
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AC Lighting's Nic Tolkien and Mike Falconer (suits and ties) with Alain Cornevaux of ESL (second, left) and Maurice Rebiffe from X&Y Systemes. Products shown included Wholehog and WYSIWYG from Flying Pig and Jands' lighting control desks.

Simple, neat and low cost, they have DMX 512/1990 output, consistent with the company's strategy to offer DMX512 as the standard product, and eventually analogue as an option. At the opposite end of the ADB range, the Vision 10/ST lighting control system for 1024 or 2048 circuits is further strengthened with the release of a new version 2.43 software which features significant operating improvements and several new key functions.

The new Vision 10 Compact for 512 circuits is a simplified design of the Vision 10/ST with limited extension possibilities and a very competitive price. "Over 100 Vision 10s have been delivered so far in 19 countries," explained Mike Musso. "This alone should prove that the system is not as bad as some competitors, apparently short of arguments for their own products, keep aiming at us." At the end of the show ADB informed us that they received orders for another 11 consoles, adding three more countries to the list.

The ADB all-digital dimmer family, which started back in 1989 with the still very successful Eurodim system, is one of the most comprehensive ranges available. Released at SIEL, in addition to new members of the family,



NJD's Kevin Hopcroft and Nathalie Fabre on stand at SIEL. For the latter it was a trip home!



Sonoss' Philippe Coudyser (centre) and Etienne Dusautois (right) with Louis Barrière of Luxart.



Derrick Saunders of Pulsar shows their new 18-channel universal DMX interface unit.

was software version 1.49 which allows any products in the range to be used in architectural applications with remote control of up to 20 memories from simple push-button switches.

Another major name that always promotes heavily at SIEL is AVAB of Sweden, and the company's Kent Flood showed three of their VLC lighting control systems networked together on the stand of Juliat. The variations are endless, with the ability to link laptops, work-stations and different consoles for instance, coupled with back-up systems for automatic take-over in the event of a main system failure. Input and output signals and protocols can be connected to any station in the system and local computers could, for example, be positioned in a dimmer room to provide local display and/or control ability.

Working on stand was a Mini APN console, an AVAB MiniExpert converted to run as a VLC front end, emphasising that most older AVAB lightboards can be upgraded to the latest technology. Also on show was the Ethernet Tap Unit, a portable processing unit that can be connected to anywhere on the Ethernet network to input/output signals and protocols of different types. Connected to the VLC system with a simple network cable makes it possible

to access all data/signals/protocols of the VLC. Several thousand channels of DMC channels can be connected together with dimmer feedback, APN or IR systems or consoles, MIDI or DMX.

Another addition for the VLC system is the new Offstage option, a programme running on a separate PC connected to the VLC processing unit via the AVAB Ethernet. It allows drawing of the stage and luminaire positions and will then display the light beams moving in the rendered image in real time with the light changes in the VLC system. Offstage also supports the DXF file format which makes it possible to import AutoCAD drawings into the system and light beams are shown in wire form and with colours. The monitor can also display gobo and colour changers.

Yet another new option available from AVAB is the FollowMe system, an advanced positioning and motion sensing system which is closely connected to the VLC system and is designed for focusing and for automated control of stage and studio lighting instruments. The system can be used to focus a large number of automated luminaires with automatic registration of the positions in the control system. It can also be used for automatic



The new 'Open Road' flight-case system was introduced by Rythmes & Sons. In the picture above, Claude Walter (with thumbs in the new locking system) demonstrates. Also in the picture is François Dhalmann.



Wybron's Daryl Vaughan and Celco's Keith Dale on the Sonoss stand.



Jean-François Chéron and Brigitte Delehaye of Durango (left) with Le Maitre's Rick Wilson and John Lethbridge of Cerebrum Lighting.



Optikinetic's highly successful new K Series effects projectors hit SIEL for the first time in the company of Neil Rice (left) and Jean-Pierre Franjou of Robolight.



Dominique Picquard and Marie Falferi of Griven France with Chiara Pellicelli (right) of Griven Italy. In picture is the new DMX programmable 4k Imperial searchlight.



Ivano Burato of Coemar (left) with Corrado Silvestri of TAS.



UK duo of Anytronics' Bob Hall and Alex Collister of Andolite.



Jem's Bob Wells fires off a ParFog 250 on the stand of JC Factorie.

tracking of up to four individual performers.

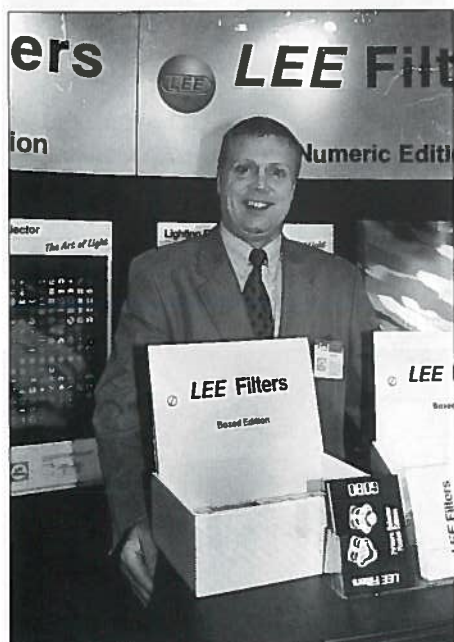
Finally, and providing a neat link to the major French manufacturer **Robert Juliat**, AVAB's DMX controlled Conductor moving yoke was demonstrated with the new Juliat ARC 1200 HMI Fresnel luminaire. Causing the biggest stir for Juliat however, was their new 700W HMI profile (which is the same size as their successful 1.2kW tungsten unit). This unit offers an incredible image resolution and high light output but is only available without fader at the present time, although we are promised that this situation will change in the near future. Also previewing was a 2500W HMI Fresnel with a large 250mm lens. With the theatre sector in mind, this unit is designed to be light

tight, not the case with most HMI Fresnels manufactured with the less exacting studio environment. The company's architectural range, which includes the already mentioned ARC 1200, is now complete with both profiles and Fresnels offered in long life sources and available with or without hot re-strike and digitally-controlled fader.

Also new from Juliat are the six channel Digi Tour V and VI portable digital dimmers which have more features and are lighter and more compact than their predecessors. As with all Robert Juliat dimmers the units have the 6000-step high resolution smoothing system to provide a perfect fade for difficult sources such as fluorescents via standard DMX. The good

news is that the new units are also cheaper than their forebears.

Further changes on the representation front have seen **Jem Smoke Machine Co** go back to Patrice Miquélis and his new company **JC Factorie**, which was set up with the support of **Coemar**. For Jem, Bob Wells is now UK and export manager and gave me advance news of a new machine, without heater block or pump, "that will revolutionise the smoke machine industry." It's due to see the light of day at PLASA in September. For **Coemar**, Ivano Burato showed me the new NAT projectors, the Zoom 15/30 and 1200DX, a scaled-down version for the budget market, but more on these when we report from Rimini next month.



Lee Filters' Paul Topliss puts some colour onto the Panavision stand.



Patrick Brogan with the CCT Freedom range, launched at PLASA in September '95.



Wayne Howell shows Artistic Licence's new Grand-Master 120 channel lighting console.



Christiane Staboli of Teatro with Colourbox-2 on the stand of Galatec.



Tony Shembish (left) of Avolites pictured on the stand of Dimatec with AC Lighting's Nic Tolkien.



Eric Espaze of La Boutique Spectacle (left) with Joe Tawil of The Great American Market.

France and SIEL are big on large format projection and all the necessary techniques that go with it. The sheer look of the engineering of E\T\C AudioVisuel's products draws the visitor, and they were showing a prototype of a new head for turning images through 360 degrees. Ludwig Pani were present on the stand of Durango and were keen to report their enthusiasm for the up-coming opening of US distributors Production Arts in London this month.

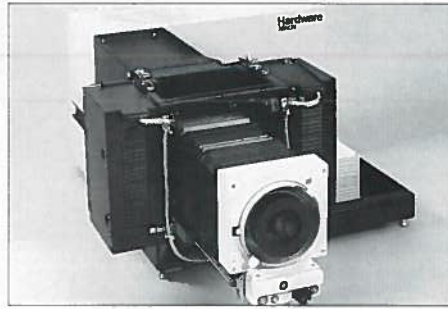
Hardware for Xenon announced a new DMX512 compatible scroller for 18.5cm wide film where each scrolling element is under the control of separate microcontrollers and the position, speed and tension of the film is carefully maintained. The unit can handle 30m or 30m x 2 with positioning accuracy to within five-hundredths of a millimetre.

Artistic Licence launched their Grand-Master, a virtual lighting console which runs on a PC and outputs DMX512 through their PLASA award-winning DMX Dongle. It features 120 channel ability with a two preset manual playback and a sophisticated timed crossfade. Scenes are programmed using the on-screen preset fader window by snap-shotting the DMX512 output of another console or as percentage levels on a spreadsheet. Fully compatible with Windows 95, Grand-Master can be controlled remotely by the MIDI input from a PC's Sound Blaster card.

Further technical trickery, measuring just 85 x 85 x 55mm, was noted on the stand of Durango where Maris Ensing showed his new DMX-Twin Relay Converter which converts DMX signals to relay closures, making it ideal for the control of special effects and equipment such as stage machinery under the control of a lighting desk. The address of the first of the two relays contained in the unit may be selected in decimal



Anne-Marie Pavillard (right) of E\T\C with Anne Johnston of Production Arts. E\T\C's new prototype unit for turning projected images through 360 degrees is in picture.



Hardware for Xenon's new DMX scrolling unit.

by three rotary switches (all 512 addresses are available). The second relay is set automatically to the next address. A relay is switched 'off' if the level on the corresponding channel is at less than 50 per cent, and switched 'on' as soon as the level reaches 50 per cent or above. Indicators take the shape of a green power LED, and two red LEDs indicate the status of the relays. The unit needs a power supply between 9 and 24 volts AC or DC, and has a DMX 'In' and 'Thru' connector. The relays are 'change-over' types providing voltage-less contacts with maximum ratings of 240VAC, 8 ampere.

In addition to JEM, on the smoke machine front Le Maitre showed their G300 Generator on a dedicated CP&P stand, Smoke Factory was shown on ETTC and Effects Company products had a very neat and professional showing on the stand of CSI, a distribution company that did its manufacturers proud as far as presentation was concerned, and that included High End Systems, Lightfactor, Space Cannon and FAL amongst others. On the stand of Rythmes & Sons, in addition to their neat Open Road flight-case system (see picture), was a new dry-ice smoke generator. In collaboration with Bi-Solo, a specialist effects company, and the



Zero 88's new Linebacker unit was introduced to France by sales director David Catterall (left) and Jean-Paul Querry and Thibault Manchon of distributors LCB.



Ludwig Pani's Hermann Sorger (right) with the company's latest recruit, Manuel Wenger.



Fons de Vreede (left) of Flashlight (Holland) with Cerebrum Lighting's John Lethbridge.

technical department of Opéra Bastille and Palais Garnier, they have designed a radically different range of generators. The principle involved is that of sprinkling the dry ice with boiling water using a regulated hydraulic circuit. The electronically-regulated sprinkling system allows very fine and very fast adjustment of the effect, several of which can be controlled either from the stage or from the lighting control position, by a single operator. The generators are flight-cased, and come in 12-18kW and 24kW sizes.

Hydrelec of Argenteuil made their first-ever exhibition appearance and of note was their range of AMH electronic igniters. The line-up is UL certified and has an integrated operational timer and integrated RC ignition supporting circuitry. The timing and RC values are matched to leading lamp manufacturers specifications.

A new line in black-wrap was pointed out to me by the eagle-eyed Joe Tawil of The Great American Market. Available from La Boutique du Spectacle, this aluminium tape is black on the adhesive side too, if you get my meaning. Just two months after its introduction, it now accounts for 90 per cent of the company's sales in this product sector.

As usual with SIEL the big industry names like Martin Professional, High End Systems, Coemar and Clay Paky all had their space to show off product . . . and so did the vast majority of the pro audio companies. The only name missing in any prominent way was that of Strand Lighting who had their main-line equipment at the stand of French distributor Eclalux. It was the first major show that I can remember where you couldn't see a Strand banner hanging from somewhere in the hall.

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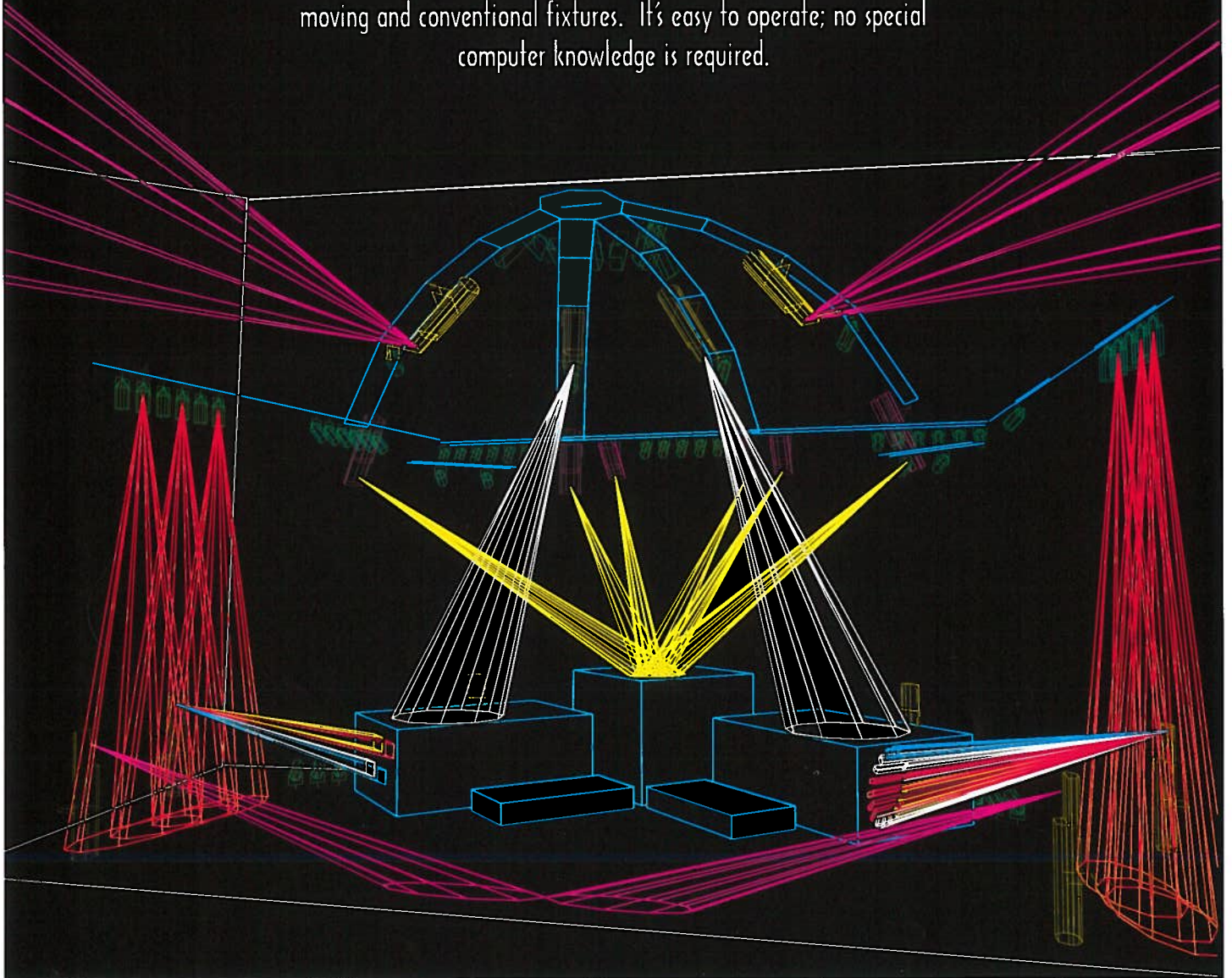
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RAINBOW NATION

Steve Moles provides an insight into lighting, sound and production services in South Africa

Johannesburg is an unusual city to say the least. Set in the heart of South Africa, it is the country's largest population centre and without doubt dominates all aspects of South African society, from art and science through to commerce and industry, by its sheer size.

With Pretoria, the seat of Government, set some 75 miles away to the North, Johannesburg bears comparison with Sydney in Australia or New York in the USA, in that as the country grew to nationhood, its forefathers wisely distanced the political capital from the commercial. There the comparison ends, for despite being one of the world's great cities, Johannesburg is set neither on the banks of a great river nor on the shores of a natural harbour. A mile above sea level, Jo'burg in fact sits astride a north-east, south-west watershed, its closest analogy to water lying in the reef of gold that runs beneath it.

I was brought out here ostensibly to cover a special event for the South African Broadcasting Corporation (SABC), namely its re-launch into a truly multi-cultural TV network. But, when you consider that in the 20 months since the inauguration of President Nelson Mandela, in May 1994, some 14 stadium-sized international tours - bands of the stature of Bryan Adams, the Rolling Stones and Whitney Houston - have passed through the country, it's obvious that there's much of interest for the production side of the industry to look at. In the six short days I was there, I became caught up in several other events which give a much broader perspective to what visiting production managers and crews can expect if they care to sail south to this formerly forbidden territory.

As we came into land, the captain announced that the South African football team had won their semi-final and would be playing Tunisia in the final. The African Cup of Nations (the continent's equivalent of the European Cup) may not be of much significance to Sky Sport or the BBC, but for South Africa it is of great import. Due to the years of isolation under apartheid, this was the first time they were host nation, and now, following their victory in the Rugby World Cup and, more recently, their sound thrashing of the English cricket team in both one-day and five-day Test series, this was the country's chance to pull off a remarkable hat-trick.

Woza Power (Woza is pronounced *hose-ah*, a Zulu word meaning 'come' or 'bring') were supplying standby generators for the floodlighting system at FNB (First National Bank) Stadium in Soweto, where the final was to be held. Although the game would be played in daylight, no chances were being taken in the event of extra time being needed, as sunset falls smartly in this part of the globe and any interruption of the power supply to the lights would be likely to spark a riot of biblical proportions.

Woza is a relatively new company. Formed following the fall of apartheid, it quickly spotted that big one-off events would soon become the norm with the dropping of cultural and sporting sanctions. As well as supplying generators for all the above-mentioned sporting events, the



An enormous hangar at Waterkloof Air Force base in Pretoria provided the backdrop for SABC's re-launch. Above, the audience await the arrival of a massive jumbo jet on stage, which was to make a dramatic entrance (below), appearing through a cloud of smoke.

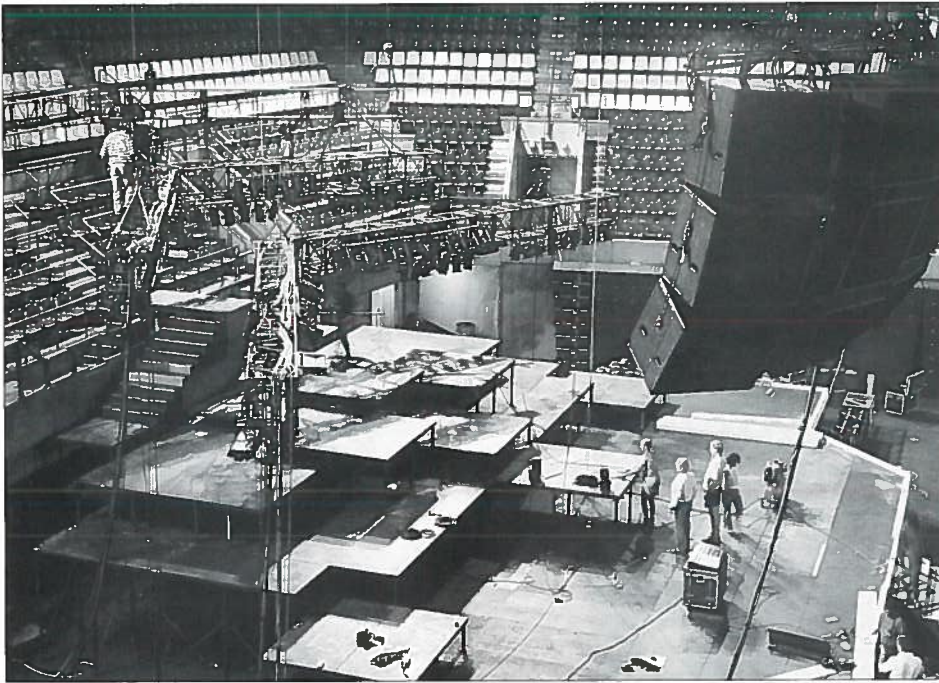
company is also regularly called upon to service the many concert tours which pass through.

I was unable to attend the cup final, instead visiting a one artic' truck-sized rock and roll tour passing through Pretoria (more of that later), but I did hear the last 20 minutes on the radio. As it transpired, South Africa won, and the whole country, especially Johannesburg, went wild. It was a surprise for me to discover that Soweto exists well within the city limits, a distinct suburb in the south west, not just of corrugated iron shanties, but brick-built houses as well. Thus, when the celebrations around the stadium commenced, it brought the whole city to a halt. For those still suspicious of the politics

of this new democracy I can only tell you what I saw. Blacks, whites, peoples of all colours in their thousands embracing, dancing and singing in the streets with one another. The South African media now refer to the country as 'The Rainbow Nation' a phrase I heard repeatedly, and there is no doubting the sincerity and optimism of the majority of people from all racial extractions.

The one-truck tour alluded to earlier was by none other than Smokie, a band that had slipped completely from the consciousness of the British record-buying public for almost 20 years until the novelty re-recording of their old hit 'Living next door to Alice' was immortalised





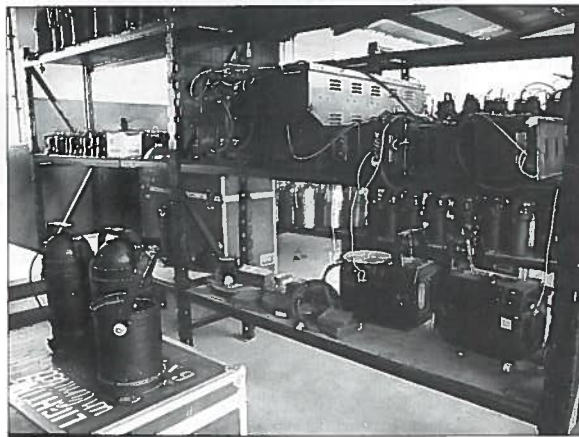
The Standard Bank Arena in Johannesburg, normally a 6,000 capacity sports stadium.

by the addition of a few well-chosen profanities from Chubby Brown. Their tour of South Africa lasted 12 days, played 10 venues in the 2,000 to 4,000 capacity range, and was a sell-out everywhere.

I must at this stage confess a certain partisan feeling for Smokie: I worked with them regularly for the last three years of the seventies, a time when they had already ceased to be a force in English pop, but could still fill 10,000-seat arenas in Germany with ease. Speaking to bass player Terry Uttley 16 years later, I was surprised to learn that they have virtually re-invented themselves in the last six years, have a new album recorded in Scandinavia that is already a platinum seller there, and last year sold out Germany's largest indoor venue, the Westphalen Halle, two nights running, topping the bill of a seventies revival package. Their stint in South Africa was preceded by shows in Moscow and will be followed by a tour of Poland and then Japan, a market never cracked in the seventies that is just opening up for them now.

Smokie had a PA, lighting and staging package supplied to them by the promoter, Louis Van Wyk. He is the younger brother of Attie, who promotes almost all the big international acts that visit the country. Unlike the European market, it is the norm here for promoters to pick up the tab for touring equipment, rather than the band's management, even for local domestic acts. The sound system came from PA Sound, a Johannesburg-based company supplying a Turbo TMS 3 system with a Yamaha 2000 desk FOH and a Ramsa for monitors. PA Sound manager Phillippe Roche told me: "The company has good relationship with Britannia Row, from whom we purchased the TMS 3s. We often bring in XL3s and PM 4000s from the UK, when artistes need a higher feature desk."

The lighting equipment was supplied by Lighting Unlimited, another Jo'burg company, and one of some stature at that. The dominant supply company to the touring industry in South Africa, they will feature again in this article, so suffice to say here that for Smokie they were providing 120ft of E and A-type trussing, 96 Pars, Avolites dimmers, a Jands Event console, a Lycian 400HTI followspot and



Lighting Unlimited: main supply company to the SA touring market, whose policy of reinvesting in product has paid off.

full rigging, including Verlinde one ton motors. Staging was provided by Stage Design; this was a simple system of 8 x 4 staging modules built on steel frames with 18mm plywood decks. The steel frames take a variety of different length two-inch box section legs and can be rigged up to a stage height of two-and-a-half metres.

The risers ship in purpose-built dollies, which carry five sections each including legs and accessories. Stage Design are, like Woza Power, a company with an eye on the future. They currently hold a stock of 450 staging modules in Jo'burg, with another 150 in Capetown, where they share a facility with Lighting Unlimited. They will be supplying 250 modules for Tina Turner when she starts rehearsals for her latest tour in April. The company are also supplying roofing systems for the tour, which in South Africa will visit the country's three main cities before heading off to Europe. Stage Design own an Edwin Shirley roof and run another for SGB scaffolding SA. They have also just purchased a full-size StageCo roof from Belgium, which recently saw action with Pavarotti.

Company manager Shaun Hamilton is already contemplating the purchase of a second if the demand for outdoor roofs continues: "It's not that we expect the business to expand that much more," he said, "but we do see the need to provide the most up-to-date roofing technology to keep our business developing."

The company has also built its own crowd control barrier. Similar to the Mojo system, it comes in one-metre sections, features footplates on the crowd side for stability, step-ups on the stage side to give security staff access to punters, and in what may be a unique feature, has a rolling top rail to facilitate pulling people over into the security area.

The SABC re-launch was prompted by the need to address the multi-cultural demands of the new nation. South Africa has 11 widely-spoken languages, making the broadcasting solutions necessarily complex. Previously, Afrikaans and English predominated, Afrikaans having been forcefully imposed upon the nation by the old ruling regime. Indeed, it was the imposition of Afrikaans as a compulsory subject at all schools that initially sparked the major rioting in Soweto in 1975/6. To give the clearest explanation of the three new channels that would replace the old system, two hours of prime time was set aside on Sunday 4th February. The special programme, broadcast live on all three stations, would be staged along the lines of a variety show with guest appearances from TV celebrities, both domestic and international, interspersed with information about the content of each new channel and which sections of the community each would be supporting. To add momentum to the occasion, SABC also hired the Standard Bank Arena, a downtown 6,000 capacity sports stadium, to stage a special morale-boosting event for their staff, two days prior to the big show. This event was used to convey the message of what the new station formats would mean to all employees. A large, multi-level stage was installed with a three-truss 180-lamp lighting rig above, with a dozen Intellabeams; The PA system was an 18-cabinet

rig of Turbo TMS 3s. Anne Williams, a freelance television director, was called in to run the show, and chose the same service companies used by Smokie.

As you may have gathered, the service market in South Africa is quite tight, especially in Johannesburg. However, there are several PA companies around, lots of Turbo systems and a fair bit of EV Delta Max is available. It is the relationship between promoter and supplier that determines company stature. PA Sound is owned by Attie Van Wyk who, as was stated earlier, is the country's biggest promoter of international acts - this gives his PA company a certain edge. However, the tie-up also makes for a conflict of interest - most other promoters avoid using his PA company if they can - and for this reason PA Sound is looking for a partner to buy out Attie's interest.

Lighting-wise, Lighting Unlimited have no such ties, but a dynamic MD and a deliberate policy of pushing along the market by consistently re-investing profits in equipment has made this company the biggest in South Africa - and this only five years after its start-up in 1991. Company founder, Ofer Lapid, is a most unusual man - one of those people that a hostile environment can precipitate to the top. An Israeli by birth, he visited South Africa 13 years ago and never left: "After completing my service in the Army, I wanted to get away, so I joined a travelling theatre show. When we

reached South Africa I was excited by the potential displayed by the people of the country. It was obvious to me - even then - that change would come."

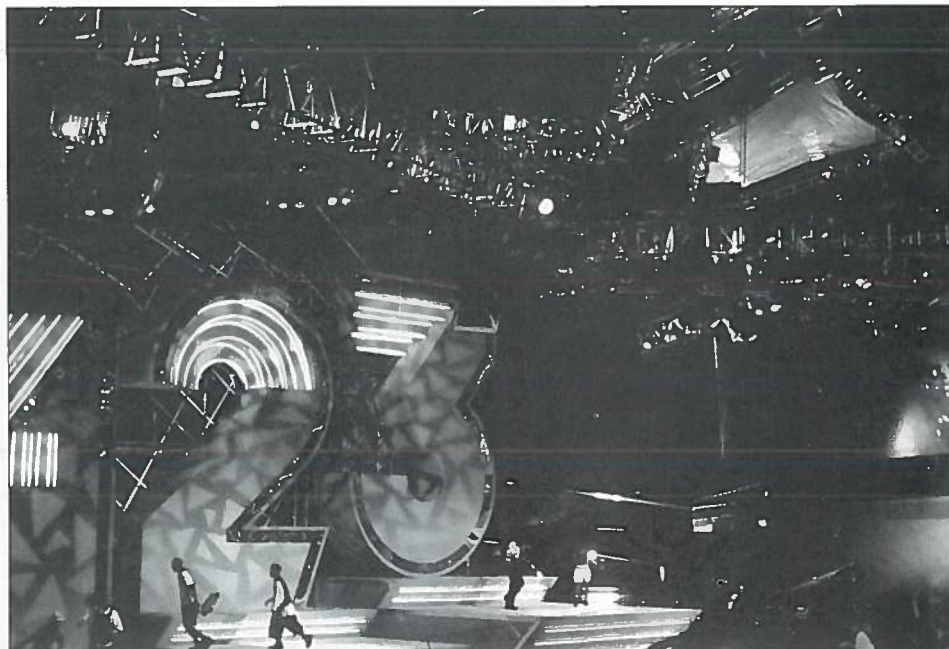
Ofer initially spent several years working as a roadie for Johnny Clegg, a white performer raised by Zulus, who has toured Europe. When Michael Jackson's most recent tour crossed paths with Johnny's in Lyon, France, he found himself outsold by the South African. Clegg is sometimes referred to as the 'African Bob Dylan'. For Ofer, finding himself the only white man working in the African townships (Clegg is not seen as a white man) forced him to quickly learn their language and culture. Now fluent in Xhosa, Zulu and Twana, he was, in an ironic twist, also taught to speak English by an African named Lucky Nkosi. "I met Lucky at Sun City - he was operating a Galaxy board for a floor show there, while I was trying to learn the Morpheus desk. All I had was the manual - in English - which I couldn't understand, so Lucky took it upon himself to teach me both the desk and the language, spending much of his precious free time sat in his hut reading and teaching by candle-light."

It was at that time that Ofer saw opportunity looming: "I told Lucky 'one day I will run my own lighting company in South Africa, and you will come and work for me'." True to his word, Lucky now crew-bosses many of Lighting Unlimited's projects, one of 60 full-time employees at the firm.

For SABC the two-hour special was a massive undertaking: not only was it a live broadcast, but the show would also have a live audience - some 3,000 dignitaries from home and abroad - and it would be addressed by the President himself, Nelson Mandela. For a venue they chose an enormous hangar at Waterkloof Air Force base in Pretoria. The central performers' platform, plus wings, made for a stage area 60m across, and this was pushed even wider by a nine-cube videowall each side so the audience could watch pre-recorded material. To give you some perspective on the size of this stage, a Jumbo Jet, kindly provided by South African Airways, made a dramatic entrance during the opening number, appearing through a cloud of smoke, and parked neatly back-stage centre. A backdrop for half the programme, the Jumbo also regularly disgorged many of the guest stars as their turns came.

You will not be surprised to learn that the lighting system - inevitably provided by Lighting Unlimited - was huge. Almost 700 Pars, 62 Molefays, 24 Intellabeams and 60 Icons, hung from over 1000 feet of truss rigged from 50 one-ton Verlindes, with four 2kW Super Troupers out front. The lighting designer for the show was Tim Dunn, one of two ex-pats that work for LU in Johannesburg, the other being Bill Lawford, both of whom will be well-known to many readers. Tim was called in by Andre Roussouw, SABC's lighting director, for the show: "Tim is probably the only man in South Africa with the necessary experience to deal with a show of this size," was Andre's simple rationale.

From a televisual perspective, the show worked very well; for a big format show, with hundreds of dancers and performers all over the place, the pictures looked great, with lots of colour, movement and effect. If vision control do deserve a slap on the wrist it was for repeated use of an extreme long shot that encompassed the entire stage area. There was never going to be enough light or visual



The lighting system for the SABC launch was huge. Almost 700 Pars, 62 Molefays, 24 Intellabeams and 60 Icons, hung from over 1000 feet of truss, with four 2kW Super Troupers out front.

information to make this shot anything other than dark and dull, a letterbox of light in a black screen. There were also a couple of enormous whoopsies from the sound man, who shall remain nameless. After a flawless and spectacular introduction number, the first tape clip was mis-cued and the problem further compounded by him freezing rather than immediately correcting it. Robert Guillaume (who some of you may recall as 'Benson' on TV, a sort of Black American Jeeves the Butler) was rigid throughout the night, clutching his radio mic' as if his life depended upon it; though as a soap actor, perhaps he was just un-used to performing as a compere on a live show.

The consummate performance of the evening, however, came from Nelson Mandela. I was fortunate enough to see and hear him twice in the short time I was in the country. He is a man with enormous charisma, tempered with ample humility. What other President would you see turn up for a cup final in a team shirt and then dance for the crowd after presenting the Cup? Like Ghandi, Mandela is able to trip lightly between humour at the ridiculous nature of life, whilst retaining perfect dignity. Such is the conviction with which he speaks and the power and emotion implicit therein that I was, on both occasions, almost reduced to tears. Of the many hundreds of people I met and spoke to, of all colours and persuasions, including many Afrikaners, there

was not one who did not believe this man to embody the future of the Nation and did not pray earnestly that he would survive for many years to come.

Mr Lapid was right in his assessment of the potential contained in this country and its people - it's enormous. But it is also fragile - there is still great violence in the society, and the rising level of crime, particularly armed burglary and car hijacking, is the small-talk of the tea shops and shebbeens. You can easily buy an AK47 on the black market and ammunition is plentiful. On the plus side, it's really no more dangerous than downtown Birmingham or Glasgow on a Saturday night.

In terms of infrastructure, South Africa is like Europe: major cities like Johannesburg are ringed by six and eight-lane highways which stretch out into the bush linking across the country. Rail and air links are equally good. The people from Whitney Houston's entourage who felt it necessary to turn up with case-loads of canned food for her recent tour, might be interested to learn that you can get just about anything here - they even have US-style shopping malls! This is not a third world nation. Last year 6.8 billion Rand of foreign money (approximately £1.2bn) was invested in the country and the economy is growing at a rate of four to five percent per annum. If the entertainment business is anything to go by, South Africa is a good place to do business.

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ON TOUR

by STEVE MOLES
AND PRODUCTION NEWS

Björk

Sheffield Arena

LD: Paul Normandale

SD: Kevin Pruce

When Dawn French parodied Björk in the French and Saunders TV show recently, it was, in a way, ultimate proof that this diminutive performer has been adopted into the hearts of the UK public. Frequently in the press over the last couple of years - mainly for reasons of her quirkiness, small physical stature, and novel musical style - she made an inspired choice for a Christmas single, and suddenly 'Björk' was a name everyone was familiar with - even if they weren't quite sure how to pronounce it.

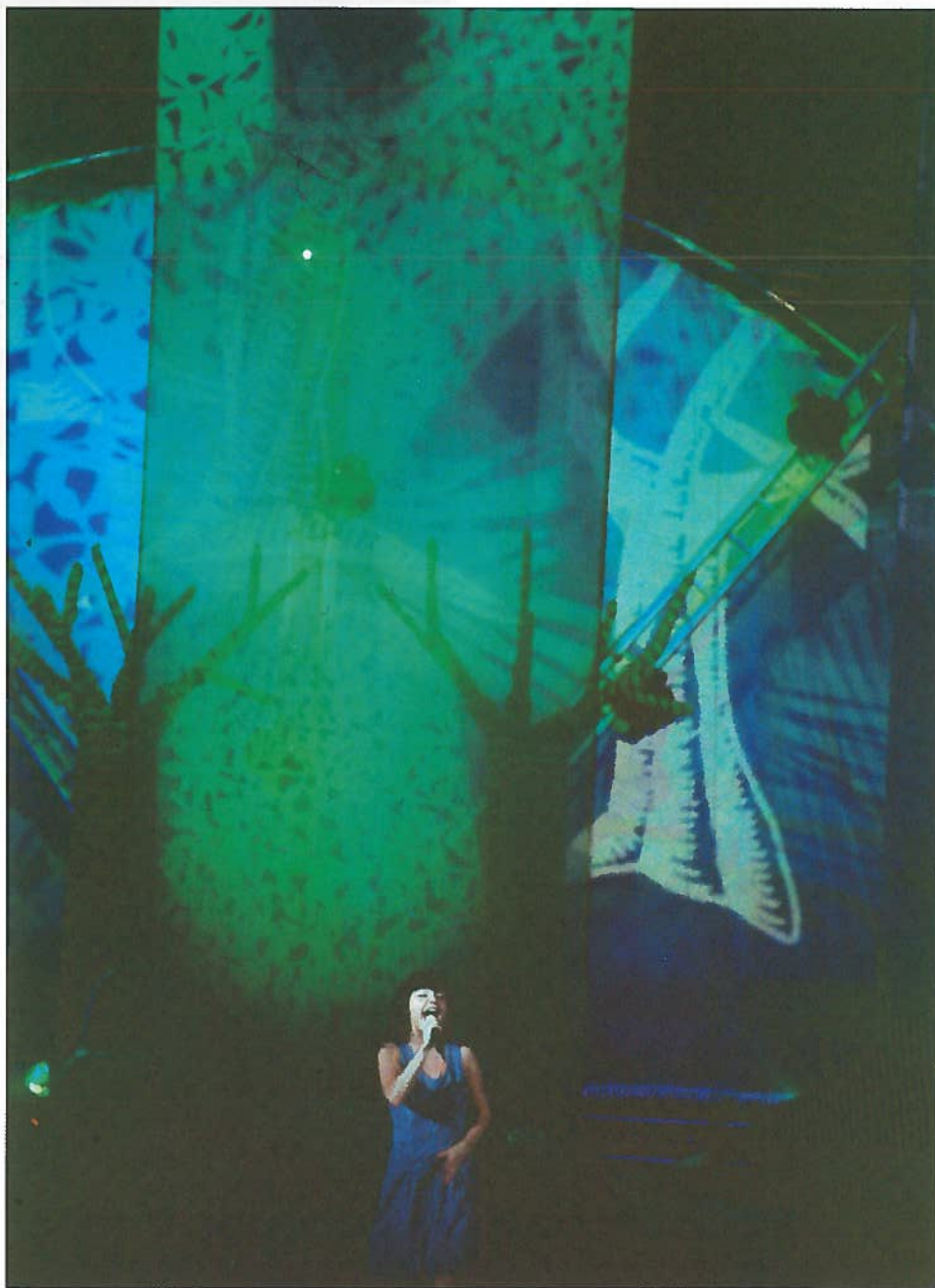
Like most performers of genuine talent, she is no overnight success, having first come to the attention of the British music-buying public some eight years ago, with the Sugar Cubes; before that, she worked as a singer for many years in her native Iceland. So she has served her time learning her craft, but the question that remains to be answered is whether she can sustain the new, wider appeal that 'It's So Quiet' has given her?

LIGHTING

One of the less prominent lighting companies - but no less proficient or able than their peers - Lite Alternative are servicing this tour, with company owner Paul Normandale acting as both lighting designer and board operator. An aptly named company, Lite Alternative has several distinctions under its belt, not least of which is its client roster - names like The Cocteau Twins and, more recently, Polly Harvey, vie with the likes of King Crimson for sheer eccentricity. This is not a company whose gear you are likely to see on the next tour of Bolthead. In fact, you are not likely to see LA's equipment out on many tours at all, for Paul makes a point of never dry-hiring his gear, which certainly accounts for its excellent condition, and it doesn't seem to have affected his commercial well-being either.

Paul is modest and understated about his role for Björk (he has worked with her for eight years), citing her as the source of both set design and interpretational stimulus for the lighting of each song. He explained: "Björk wanted an organic/technical theme for the set. Musically, she sings in front of either purely acoustic instruments, like the accordion or harpsichord - the organic side - or a full band - the technological. She tells the story behind each song, and Daniel Adric (set builder) and myself work from that."

Thus the stage is adorned with a strange collection of trees, a small coppice of stripey green leafless trunks, mixed with three radio masts, topped by small silver satellite dishes. A semi-circular screen dominates back-stage centre, segmented by three fingers of Slick Mini Beam truss. A relatively small number of lights are spread over miles of trussing - 88 feet across the back, with another three cross-stage spans spaced downstage and a fourth way out in the house. Paul, true to form, is vague about what's up there and how he uses it: "There's 40 or 50 Pars, a couple of spots on truss, and for the first time I'm using Super Troupers out front for



her." He then graciously points to Fraser Elisha, his Vari*Lite operator, and says: "He's the one who does all the work. I just make the tea." After watching from behind them both during the show, I can say that each works equally hard. Cues are tight, not so easy with Björk's jazz-influenced

*"She could sing through a megaphone
and still charm an audience
into loving her."*

song structures - she floats her phrasing all over the place. While Fraser runs through some 400 cues (there are 26 VL5s and 25 VL6s in the rig, plus four VLMs) on the Mini Artisan II, Paul qualifies the 'less is more' theory by using barely one page of his Avolites Sapphire console. As he said: "This will make their Steve Warren cry."

Fraser appeared quite at ease running the show on the Mini II, although he did confess it required greater concentration when programming, especially on multi-layered functions, such as accessing single lamps. Lighting shared the presentational honours with projection. A 5kW Xenon projector from Creative Technology, operated by Andy Joyes, was fitted with a six inch E/T/C Audiovisual scroller. The images spring from Björk's imaginative well: simple line drawings of an abstract cityscape gently track across stage, or strange blocks of computer text made up of arcane symbols hang in mid air, transforming the stage into a harsher environment.

The projector also had one unintentional effect: the lamp pushed out an inordinate amount of UV, even over the 40 metres or so distance to the stage. So it was that Björk, clad in plain, pale grey shift, would suddenly spring forth, brown skinned and with her dress glowing Persil-white, as she moved into the projector's beam.

SOUND

Like Paul, sound engineer Kevin Pruce has been working with Björk since her days with the Sugar Cubes. Having travelled through a variety of PA systems in that time, he is currently using the d&b 402 system from Wigwam, which he was persuaded to try by Chris Hill, and has now worked with since last July.

Although relatively small and light, a lot of cabinets are required to adequately cover an arena of Sheffield's size. Kevin had 26 cabinets flown each side: 14 highs and 12 bass, with a further two bass and three sub-bass B2 cabinets on the floor. The system is intended to be fully-flown, to achieve both efficiency - in terms of coupling to concentrate large amounts of energy where needed - and to give optimum coverage. It's the latter point that can, seemingly, present problems. The sound projection is very precise, so the flying system (from MAN) allows total adjustability in every desirable parameter. As rigger Jeremy 'Jez' Craddick pointed out, this makes for a totally live, fluid cluster, where any adjustment of one parameter impacts on all the others. Therefore, rigging the PA takes much longer than riggers and stage crews are used to, with much tweaking of both points and the flying frame. However, as Craddick said, it probably adds an hour to his day, which seems a fairly small hill of beans compared with the amount of time usually taken by a crew of lampies to get their gear up and out of the way.



The proof, though, is in the pudding, and Kevin is a genteel mixer - the level he used to fill the Arena was modest by comparison to most, meaning that flaws are more easily exposed in such a relatively controlled situation. A circumnavigation of the floor and the mid bleacher gangway revealed only one hot spot, at the upper level, at perhaps 15 degrees to the front stage edge, where her vocal was noticeably brighter, but no holes were apparent. Kevin's Yamaha PM4000 had three pan pots, cunningly disguised as beer taps, jury-rigged just in front of the mastering section, which enabled him to selectively pour three sub mixes up to a separate PA source - some 12 more cabinets stacked atop the bleachers at the opposite end from stage. This tri-phonic mix proved an intriguing effect. Björk's music is often underscored with back-ground sounds - babbling brooks, tinkling bells - sounds that accompany but aren't part of the melody. It is this quality, I believe, that brings the distinctive charm to her music and certainly gives an intimacy to the live environment. It's a poor analogy, but I can only liken it to seeing a film like 'Silence of the Lambs' in a good movie theatre: when Buffalo Bill was stalking Jodie Foster in darkness, and we watched through his night vision glasses, it was his breath we could hear coming from the back of the room, blowing down our shirt collars. So it was with Björk's music and the tri-phonic sound; we were immersed within it, occasionally enveloped by it.

Paul maintains that Björk could perform under a single lamp and still reach her audience. Certainly all the comparisons of 'Nordic Ice Fairy' and 'Elfin Songstress' that the music press are so fond of is borne out by a certain magic in her performance. She is literally spellbinding. In the midst of a huge stage, it's difficult to take your eyes off her tiny, animated form. Kevin supported this: "She could sing through a megaphone and still charm an audience," he said. Enchanting.

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EQUIPMENT NEWS

Spotlight Control



Transtechnik have introduced the FS 90 radio remote-control spotlight system. Modular in design, the FS 90 comes either as a complete system (spotlights, motor-driven spotlight gantry, remote-control unit) or as a sub-system.

A handheld transmitter controls all the functions of a maximum 64 spotlights, either singly or in groups. An illuminated display on the transmitter tells the operator the present state of command, along with the previous order. The power supply to the spotlight also feeds the receiver, so no extra cabling is required.

The remote control operates on a frequency which is approved over the whole of Europe, so it will not cause interference with wireless microphones or interpreter facilities.

For further information contact Transtechnik in Germany, telephone +49 8024 3008.

Philips Arena Vision



The Philips Arena Vision floodlighting system, used at the '92 Olympics and the Soccer World Cup in 1990, has now been further improved with a new optical system and a higher lamp flux.

The new optical system has faceted oval optics, which provide a range of beam spread patterns with sharp cut-off profiles, whilst the 1.8kW metal halide lamp is fixed at both ends to ensure a firm permanent focus. The luminous flux of the lamp has been increased to 160,000 lumen, and two further 1000W lamps will soon be added to the Arena Vision product range, designed specifically for the demanding environments of indoor sports halls and city beautification.

For further information contact Philips in London, telephone 0181-781 8140.

Lamba's New Range

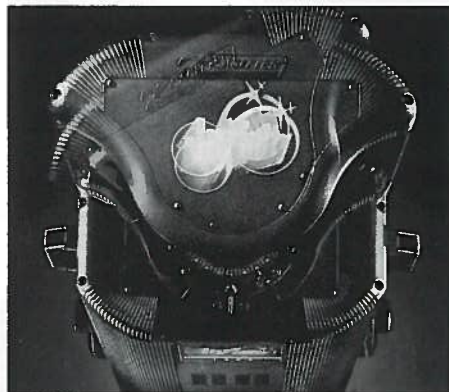
Lamba plc, manufacturers of the KAM range of audio equipment, have introduced a new range of power amplifiers to complement the existing KAM line-up.

The KPA range of power amplifiers consists of three units - the KPA 500, 700 and 1100. Designed and manufactured in the UK, they feature Speakon output connectors to ensure compatibility with most modern speaker ranges. The units have full DC and short circuit protection, with the KPA 1100 having the added benefit of auto-resetting thermal protection.

An additional feature of all three models is that each has two internal cooling fans. This system, where one fan blows cool air into the case while the other extracts the heat, reduces the possibility of heat-related problems when the amplifiers are driven at full capacity.

For further information contact Lamba in St Albans, telephone (01727) 840527.

Sagitter Refinements



As a result of feedback from users, Sagitter have made several improvements to their Infinity scanner. Firstly, the mirror movement has been enhanced with the addition of the new Smooth BC system, and secondly, the dimmer and shutter systems have been changed, allowing a high-speed strobe effect and smooth mechanical dimming.

Sagitter have also introduced a new followspot called Tracer, which has electronic control of internal parameters. Features include a virtually silent iris, aperture memory, high-speed strobe effect and motorised focusing.

For further information contact Sagitter in Italy, telephone + 39 35-951 777.

Wall to Wall - Wildfire has released a line of visible and invisible wallpapers. Whilst it's not immediately obvious what this may have to do with the lighting and sound industry, the company's range of fluorescent wallpapers have already been used in themed entertainment attractions and nightclubs.

The paper works with either blacklight tubes or with Wildfire 'Long-Throw' UV lighting fixtures. It is sold by the roll and is available in visible colours which can be seen under normal white light or invisible colours which are totally invisible (white) until illuminated by UV lighting. For more information contact Wildfire in California, telephone +1 (310) 398 3831.

WYSIWYG's Autofocus

Flying Pig Systems have introduced WYSIWYG Pro with Autofocus, a package which allows the lighting designer to focus all the lights in a rig on one spot by simply clicking a mouse on a screen position.

Autofocus works by generating focus information directly in WYSIWYG which then directs the (Autofocus compliant) console to move the selected fixtures to the chosen spot. Other information, such as patch and iris control, can also be transferred from WYSIWYG to the console. WYSIWYG Pro can also be used on-site as a blind programming aid, or more fully to allow the operator to arrive at rehearsals with an entire show completely pre-programmed before powering up a single light.

For more information, contact AC Lighting in High Wycombe on (01494) 446000.

QSC Powerlights



QSC have increased their award-winning Powerlight series of amplifiers. The PL4.0 is a lightweight unit, weighing in at just under 30lbs, and delivering 2,000W into two ohms.

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

TP Software System

Theatre Projects have developed a new bi-directional software system which will monitor and provide some degree of control over the operation and running of Sky-Arts. Aimed at permanent installation applications, the software provides full status information on pan, tilt, dimming levels, focus and colour overseeing all the light's characteristics, including head temperature, bulb temperature and bulb current, and allows the operator to remove the Sky-Art from its loop and reset as necessary, should a problem occur.

The software, which has not yet been given a working name, also allows the operator to strike all the units in one go and features a very basic memory in which various preset states can be stored.

For further details contact TP in London, telephone 0181-575 5555.

Renkus TRC Series



Renkus-Heinz have introduced the new TRC series of full-range, two-way loudspeakers.

The loudspeakers incorporate Complex Conic waveguides for pattern control and clarity. Multi-angled cabinet designs enable maximum array configurability and allow the units to also be used as floor monitors or ceiling speakers. All cabinets feature a choice of coverage patterns and user rotatable waveguides.

For more information contact Renkus-Heinz in California, telephone +1 (714) 250-0166.

SES Distribution Units

The new SES Film and Television range of distribution units are designed for studio, outside broadcast and location film purposes, and are well suited to entertainment event applications. The range comprises a versatile system for distribution of power from 400A three-phase mains distribution to 16A/13A end distribution.

For further information contact SES in Colnbrook, telephone (01753) 680611.

V8 Technology

The V8 'Thermionic' valve signal conditioner is the latest addition to LA Audio's range of signal processors. Targeted at the professional user, the new V8 offers eight channel active tube signal conditioning, incorporating state-of-the-art valve technology.

Created as a front end for digital multitrack machines, the V8 is set in an 19" 2U rackmounted unit, and caters for both balanced and unbalanced signals with active valve gain stages, allowing full control over signal level at -10dB or +4dB. A unique feature is the inclusion of two instrument inputs on the front panel.

The C8 eight channel compressor, again developed for the digital multitrack market, offers eight channels of compression in a 19" 1U unit. Designed to prevent overloading input amps at the front end of a digital recorder, the C8 is equipped with eight individual compressors (whose inputs and outputs are balanced on stereo 1/4" jack connectors); individual bypass switches per channel; an LED bargraph display for gain reduction and Gain and Threshold adjustment to suit -10dBV or +4dBm equipment. The C8 features LA Audio's pre-emptive auto sensing circuitry offering fully variable, programme dependent ratio, attack and release settings.

For further details, contact SCV in London, telephone 0171-923 1892.

Better Beta



Shure has expanded its family of Beta microphones with the introduction of two new models. The Beta 52 is a dynamic microphone intended to cover the low-end required for kick drums and other bass instruments. The microphone incorporates Shure's locking adjustable mounting assembly and a hardened protective outer grille.

The Beta 56 is aimed at instruments producing higher SPLs, and utilises a consistent supercardioid pickup pattern to produce a high degree of gain before feedback.

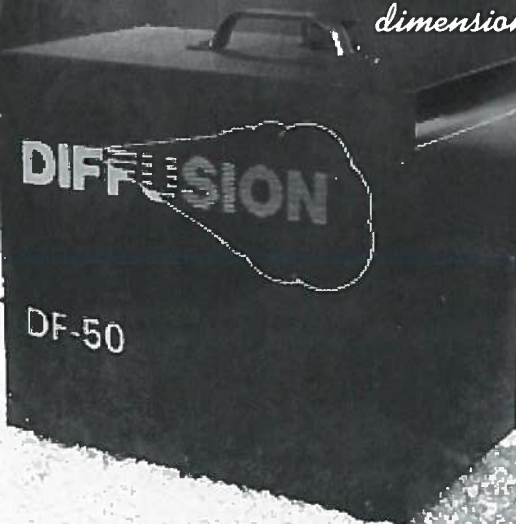
Improvements have also been made to the Beta 57 and Beta 58 models, which now have new shock-mounts which greatly reduce stand and handling noise.

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

A detailed round-up of all the latest audio products launched at the Frankfurt Music Fair will appear in a comprehensive report on the show in our March issue.

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BRIGHT LIGHTS, BIG CITY

Lighting designer Howard Eaton examines how theatrical lighting techniques have been applied effectively in visitor attractions and other architectural environments

In recent years, there has been an explosion of visitor centres, dark rides and themed visitor attractions in which dynamic displays are increasingly used to tell a story. In most cases, lighting specialists are called in to help increase the appeal and the perceived realism of the experience, and, more often than not these lighting experts are drawn from the theatre industry. It is fascinating to consider that lighting experts, whose job was traditionally to help illuminate actors in such a way as to aid their telling of a story, are now asked to bring the robotic to life. But are the two environments approached in the same way, or does the lighting designer need to wear a completely different hat?

Technically, the differences between lighting in a museum or visitor centre is usually to do with size; in these largely architectural environments the scale is generally less than the theatre, so smaller equipment is preferred for spatial and aesthetic reasons. This is particularly the case when considering showcase style exhibits, where the window of a showcase might be 1.5m x 2m, whereas an average proscenium is about 10m x 8m. The need for small equipment often means that brightness is a problem, and for this reason efficient discharge sources are often used; for example, the lamp life of the 300W and 150W HTI lamps used in my company's ripple are both about 2,000 hours, but the HTI lamp produces twice the luminous flux. Thus the HTI unit is often used in architectural applications where dimming is not required.

Longevity and maintenance show up some of the greatest contrasts between the two sectors. Theatre shows tend to be two to three hours long and, because of the dynamic use of the lighting equipment, individual units are not burning for long periods of time. Within visitor attractions, however, the system or individual units will often be turned on at the start of the day and not switched off until 6pm. The impact of this on maintenance is that in the visitor centre-type venue, far more attention is paid to long-life lamps and colours, and making maintenance easier and



The Nuclear Electric visitor centre at Heysham.

photos: Adam Grater, DHA

therefore more cost effective. Nevertheless, I still maintain that the quality of the maintenance always shows up immediately in either situation: a lamp not working in a theatre, even if it is one in 500, can be just as obvious as one not working in a showcase which is one of five. Bearing this in mind, it is obvious why there has been an increasing use of fibre optic lighting in showcases; because there is only one single light source maintenance is made much easier.

In locations where artefacts are on display, other factors come in to play. Ultra violet and visible light can have a devastating effect on old materials like fabric, wood and leather. Curators will probably specify zero UV and a maximum of 50 lux for leather. For this reason

fibre optic lighting is an ideal solution as the long glass strands filter out most of the harmful UV.

DHA is an example of a multi-skilled lighting company. It is involved in lighting visitor centres, museums, West End musicals, board rooms and even shopping centres, so the opinion of its directors on the subject of theatre and architectural lighting is well worth considering. Adam Grater, lighting consultant and director of DHA, agrees, and in his experience "architectural lighting has greater constraints imposed upon it by its environment than theatrical lighting. This is because theatrical lighting is maintained every day by professionals, which is rarely the case in architectural environments, although in



An example of 'environment theatre' inside the National Museum of Natural Sciences in Taiwan.



DHA used a rippling effect to illuminate this whale skeleton at the Natural History Museum in Oman.

museums and leisure venues there are more likely to be skilled or semi-skilled lighting professionals on hand." He also states longevity and lamplife as key to illuminations in non-theatrical leisure environments.

I am also aware that lighting control plays a far more dynamic role in the theatre than in the visitor attraction. Universally in the theatre there would be an operator controlling a specialist lighting control desk, whereas in architectural use the control can vary from just switching it on and off to something approaching the complexity of theatre lighting systems. However, nearly all are operated automatically by various lighting sequences and central time clocks.

However, although more sophisticated lighting control systems can be found in the theatre there is an increasing use, and indeed sophistication, of dimming systems in architectural lighting, restaurants, hotels, visitor centres, business centres and leisure centres, which may have some dynamic lighting. DHA, for example, adapted a Strand dimming system, more commonly used in West End productions, for the QE2; it was given a customised front end so that the restaurant manager can select different ambiances to suit different times of day. Thus, a theatrical control system can enable a form of dynamic lighting in an architectural environment.

Another type of dynamic lighting which is starting to make an impact on the architectural environment comes in the form of moving lights: for example, moving mirror fixtures have been installed with great effect in shopping malls as well as in visitor centres to provide 'show' lighting effects. The Irideon range from Vari-Lite was specifically developed for outdoor architectural use. Units such as the Vari-Lite AR5 will, I believe, revolutionise lighting in show windows, restaurants and museums over the next few years.

At the end of the day though, lighting is all about the illumination of a space to a series of given criteria, so almost all projects are unique to those sets of criteria - it's all about horses for courses. The criteria of theatrical lighting is quite heavily biased towards the evocation of atmosphere, although if you are lighting 'Run For Your Wife', or some other farce set in a bedroom, the chances are that you are not going to get moody blue lights coming out of the floor! Conversely, if you're lighting a

Sainsburys car park, the criteria will be, almost exclusively, visibility.

However, not all architectural lighting is concerned with visibility and accuracy and certainly does not have to be uninteresting. The Lloyds building is widely regarded as an exciting bit of architectural lighting from Imagination's Andrew Bridge, who also designed the lighting for *Phantom of the Opera*, and represents a classic example of a lighting designer crossing over between theatrical and architectural environments. With the Lloyds building, the Francis Marine searchlight, which was originally developed for marine use and was altered to the specification of Bev Bigham of Lighting Technology, is used in a theatrical way, throwing narrow beams of white light on to the building while a blue wash is created from floodlight fittings. The overall effect is to enhance and theatrically exaggerate the blue colour of the steel.

James Wadsworth, managing director and co-owner of Light Projects which specialises in creative architectural and display lighting, picks up this point about colour: "Traditionally, architectural lighting designers and consultants feared the use of colour, largely due to unfamiliarity resulting from lack of experimentation and practical experience. They might use different coloured light sources, some are cooler and others are warmer. The idea of starting with a bit of 'Pale Lavender' or 'Surprise Pink' or a dark blue filter is something that architectural lighting designers in the UK are traditionally scared of. The fear stems from the fact that they do not really know what the consequences are going to be: will the colour last for a long time, for example, or will the colour have to be changed every two weeks? Could I use glass colour or will it crack under the heat?"

James, whose career in lighting started in the theatre and moved with considerable success to the architectural field, commiserates that while 64 different colour glasses are available from Softone, they are unlikely to sell a lot of these to architectural lighting people. However, he believes this will change and we will see more and more use of colour and the increasing use of theatrical techniques and styles in the architectural environment. This has already started to occur in the interior of some leisure environments. For example, in The Natural History Museum of Oman, DHA used a rippling

lighting effect to illuminate a whale skeleton, producing the illusion of movement on a static display. This is fairly representative of most creative uses of lighting; it is about creating movement and dynamics where there isn't any, which can become particularly important in the relatively lifeless environment of visitor centres.

At the Hong Kong Telecom World, an exhibit called the City Street has been produced, using moving lights designed by DHA, which is also very theatrical. The street goes through a cycle from day to night, and within it are a series of exhibits pertinent to telecommunications; it is essentially an atmospheric walk-through rather than an informative series of graphic panels.

The offices of Telecom World, designed by Met Studio, is another fine example of theatrical lighting in an architectural environment. It includes a glass wall which has an ultraviolet light source behind it to provide a futuristic, yet clean and crisp feel.

With regard to the interior and exterior of a building you can make it interesting by picking out details, rather than flooding with light. Here, the principles between theatrical and architectural lighting are very similar, as the emphasis is placed on the contrast between light and shade; shade is just as important as light and can help to model surface areas.

It would seem then that lighting consultants and designers have to be adaptable in order to be successful, 'pinching' ideas from one discipline to use in another to produce something that is both interesting and practical is quite the norm. Lighting designers are a modern day development, as 10 or 20 years ago the job was done by engineers who would light something to a set of figures, such as 500 lux, and were rather oblivious to the creative criteria.

Nevertheless, we must be aware that creativity can run amok, and it needs structure and practical awareness to ensure that a creative approach can work effectively for the desired period. The lighting designer must take responsibility for what he has designed and ensure that the design can be maintained within the owner's or client's parameters. Perhaps, as a lighting specialist, our key responsibility is that whatever we design must be effective and cost efficient, whether in a theatre, visitor centre, museum or conference centre.



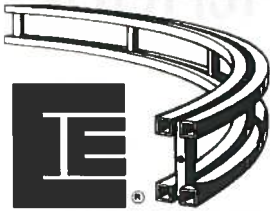
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SECOND TAKE

John Watt's View from Beside the Camera

Pan across closed curtains. It's daylight through the chinks. We hear a telephone ringing, a hand emerges from under the duvet and a bedside light is fumbled on. An unshaven lighting designer picks up the phone, wishing he had passed on that last glass of red the night before. "Hi Bob . . . end of March? Hang on and I'll check and see if it's free."

See if it's free! Apart from a meeting with the bank manager and Auntie Ruby's birthday, every damn day is free until the Millennium. "Yes, I can fit it in around then with a little juggling. Give me the bones of it," I say. "Well, it's an indie for a Channel Four, working title 'Who Did You Vote For?' in which teams of homeless people beg for money from visiting celebrities."

Planning meetings are great - the most underdeveloped team game in the world. If Rupert Murdoch knew anything about television he'd make a serious bid to televise them under floodlights at peak hours every Saturday. The players could all wear lycra tracksuits with Skysport logos and their team position across the back, with an appropriate symbol for viewers that can't read: a pair of blinkers for the production accountant, chastity belt for make up and bolt cutters for the lighting man, maybe.

I am quite good at planning meetings: it may all go rapidly downhill later, but at this stage the pictures in my head are just terrific. The chances are, the set designer has it all together too - to tell the truth, we've already met to work out a strategy that will lead the producer and director into thinking later that the concepts were all theirs. In fact, the only reason they have a meeting at all is because it says there is to be one on the production manager's schedule.

They would rather not bother, imagining that television shows metamorphosise out of thin air, like love affairs or gearbox failures on the M1. But, in order for us to build something in the studio, decisions have to be made, and for that to happen we have to communicate, armed only with inadequate language and an

accident-prone crystal ball. Yes, the designer has not only produced meticulous plans, elevations and a model, but has also done his best to think through the rules of the game. His central theme is a street in several shades of grey, homeless people on one side under railway arches, celebrities passing by on the other, up-market shops beyond. The score board is two tower blocks upstage left, the windows light up a floor at a time as the celebrities toss pound coins into the two giant caps provided.

Now the only thing you can be certain will result from this meeting is that when the set is actually built, the producer will say "isn't it big!



"I am quite good at planning meetings: it may all go rapidly downhill later, but at this stage the pictures in my head are just terrific."

I really had no idea that it would look like that." Well, you had the drawings and a model and we did spend five hours . . . but I digress.

The designer, having done the unveiling, providing the spark to kindle all the other talents around the table looks to lighting to kick things off. The director says, "We are going to have some moving lights aren't we?" I want to respond that there is no reason why we should and that there are better ways of spending £5,000, some of it on the £25 a day that they beat down my fee, but think better of it. Real men don't light shows without moving lights. OK, I say. Jules, the designer, will cut little windows along the tops of the railway arches, gaze them over and then we'll pan a couple of Wotsiscans across from time to time to look like passing trains (Victoria Palace 1946, but they used a man and a Pageant) and I am warming to the theme. We can do that 'cars

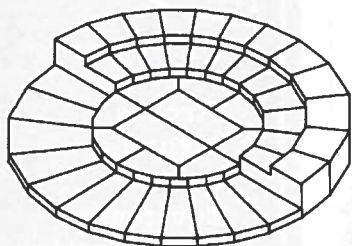
passing' effect at night with two more positioned off-stage. Smoke will help, and this presents no problem as the homeless people have a pretend open fire which lights the tight shot of the fingerless gloves over which the opening titles are superimposed. The title has changed after meetings at Channel 4 to 'Celebrity Scroungers', all gold coins with artificial speculars tumbling into a woolly bobble-hat. The night sky above the railway arch and behind the tower blocks can have a fibre optic star cloth, I suggest. Inspired idea, says the director, symbolic of the better things in life enjoyed equally by rich and poor whether from the Penthouse at the Dorchester or a cardboard box on the embankment. "Good job I thought of it," he adds.

I think of the money and run on. Can we have a black vinyl floor to create the look of a wet street reflecting the gas lights. I've done it again - I've got to put pools of light around the lamp-posts without giving the game away by revealing a shadow of the lamp-post itself. Will I never learn? Now I'm on a roll - I'll backlight the whole set in blue - it's a night theme and anyway, nearly everything on Channel 4 has blue backlight (I've no idea why, but it's trendy, like chewing gum or having a ring through your nose). So I'll do it - use blue backlight that is, not have a ring through my nose - someone might think I was the first pole-operated lighting director and I'll light the tramps - sorry, 'homeless people' in steel blue and the celebs in cosmetic pink.

It's necessary to differentiate in colour terms, as some of the celebs from the music world look a hell of a lot scruffier than the tramps. So it goes on. I'm sure most people have no idea how scientifically one plans TV programmes. The meetings last until we run out of inspiration or the director has a meeting with the commissioning editor or the pub opens. In the pub, design and lighting decide how it will really be and congratulate one another on another successful job. "You nearly went too far, Watty, telling him that Lee 132 is a delicate pink, not to mention that the followspot can see round the corner."

"Well, maybe," I respond, "but your street stretching into infinity when it's actually a painted cloth six feet behind the anchor's head was stretching it a bit too. Joking apart, do you think John Major will make a good compere?"

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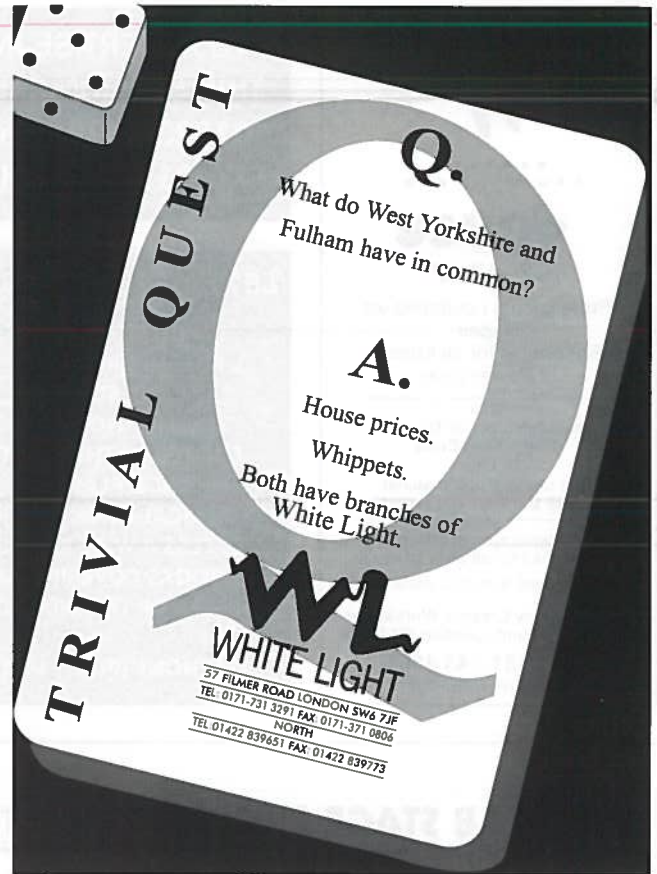
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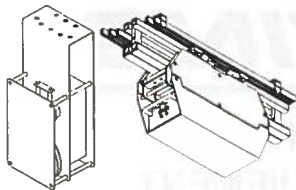
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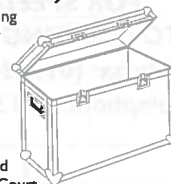


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Steve Moles interviews

Robin Elias, the 'Godfather of Rigging'

Hanging upside down from the roof of a sports hall, 150ft in the air, is not everyone's idea of a settled job. For Robin Elias, a man who risks his life in this way almost daily as his way of earning a living, it seems humdrum - it is the more earthbound winds of fortune that have disturbed his life most.

It would be coy to call Elias a daredevil, but not unrealistic to name him 'The Godfather of rock and roll rigging' as he is acknowledged by his peers in the industry. As is so often the case, he is, quite simply, an extraordinary man from a quite ordinary background. Born in Taplow, Buckinghamshire in 1950, Robin grew up in a settled, middle-class home. His father had recently retired from the army and worked for a local printer and publisher in Maidenhead, his mother was a doctor. Grammar school in Marlow led on to A-levels at college and then he attended Hammersmith School of Building and Art to take a course in building engineering. "My parents insisted on a career, but I wasn't the least bit interested in anything academic. Engineering looked appealing."

Although he didn't complete the course, the knowledge gained was to prove useful in the future. He left Hammersmith and enrolled on a course in photography at Ealing Art College. Early in the course, when he was just 18, he was asked by flatmate, Jimmy Barnet, if he would like to be a member of the lighting crew for the Cat Stevens tour of Europe. That he'd never worked with lighting before, apart from the odd photo flood here and there, mattered not one jot. In an early indication of the calculating attitude essential for the professional rigger, he took a measured step into the unknown.

Of course, the promise of foreign climes and the glamour of the music business were important factors. The camera went in the bin and he was off: "The tour lasted three weeks, but I actually stayed away for three years. I was working for Brian Croft at ESP and he just kept sending me out on one tour after another. Throughout this period the scale of productions grew and grew, and soon riggers were needed."

The concept of suspending lighting and sound equipment from the roofs of venues was unheard of in Europe. In those seminal days, touring riggers were imported from the USA, but European ways were different from those in the US. "In the States, each venue has a house rigger who knows the roof, the touring rigger just comes in, marks the stage beneath where he wants each suspension point to hand, and lets the house man do the rest. There were no house riggers in Europe, and it stopped them dead." At the time, Elias wasn't aware of it: now

it's enshrined in the folklore of rock and roll - as he clambered out into the roof void, he actually became the first rigger in the European music business. There was, however, a shrewder motive than just infamy: "I soon realised that if I became a rigger and had my own equipment, I could eventually make a lot more money."

Back in the UK, his boss Brian Croft was not keen on the idea, but Elias found a way. "At the time, the demand for more elaborate stage sets was also growing, and the two areas were related, so I found a partner in set designer Simon Woodroffe and we formed S2. Two years later, after Simon had left to start Plumline Design, I established Zenavail."

The first independent rigging company in Europe, Zenavail gained a tremendous reputation for its work. For a start, most of what were to become the leading exponents of the rigging profession passed through its doors and were schooled in the art by Elias. But, as a company, it was not renowned for its financial prowess. In a moment of astonishing prescience Brian Croft - already by this time a truly patrician figure in the industry - approached Elias with a proposal that would later come to fruition in a most unusual way.

"He said to me 'I'll give you the benefit of my experience. Your business can do one of two things: keep running as it is and it will always stumble on willy nilly. If you take on these two people here (pointing to Alan Jacobi and Derek Brown) it will really take off and be a huge success'."

Elias declined, and sure enough Zenavail did stumble on willy nilly, but his and Alan Jacobi's paths were to become inexorably intertwined as history advanced.

That's not to say that Zenavail didn't have its glory days. At the company's formative moment, Elias took on the launch of the new Triumph Acclaim, and his work on this was revolutionary. Rigging-wise, cars were to be flown, turned and rolled in the air. Even the seated audience was to be suspended and moved through the hall. This (at the time) outrageous job started a scramble amongst designers to outdo one another. Elias's business and financial acumen might have been lacking, but his experience - especially his proven ability to resolve the wild ideas of unrestrained designers - made him a unique resource in the rigging world.

The product launch phenomenon poured money into this pioneering industry. Before



long, competitors started to appear, not least of which was Unusual Rigging, a company started up by Alan Jacobi. Unusual Rigging made a speciality of handling these major corporate clients.

Where Elias's approach was purely functional (he always got the job done) Unusual Rigging injected some style into the business, recognising the importance of profile and image,

knowing how to treat the clients. They could speak the lingua franca of big business. At the same time, Elias was still rigging on rock tours - The Stones, Pink Floyd - all the big names passed through Zenavail's hands, but despite the prestige and high profile client portfolio, the company never made any real money.

"At the end of seven years all I had was myself, a secretary, my 'lieutenant' Jasper Dade and a bunch of motors. As the eighties drew to a close, market trends were not good, the era of the big car launches was already over. Eventually I decided I'd had enough."

In a move that startled many in the industry at the time, Elias approached the man Brian Croft had recommended nine years earlier and he asked Alan Jacobi to buy him out. Unusual Rigging didn't just want Zenavail for its client portfolio, as Alan Jacobi revealed when questioned about the acquisition: "It's not just about customers and equipment. Robin Elias has a wealth of knowledge - and the ability to use it - that no other rigger in Europe will ever be able to catch up with."

But then, fate intervened. Zenavail's woefully under-insured premises caught fire and burnt to the ground. The great calculated risks he had taken with his own personal safety, the enormous obstacles he had overcome in the interests of his profession, were now as nought to the foolish risks he had taken with his livelihood. At that moment, and in a gesture of compassion rarely seen in any business, Alan Jacobi drove up, stepped out of his car, walked slowly across the road and said "Don't worry about it Robin. We'll do the deal anyway."

A generous financial gesture by anyone's standards, it has been repaid many times since, not just by the unparalleled commitment Elias gives to Unusual Rigging's most valuable asset, and with good reason. When one of the world's most outrageous lighting designers, Mark Brickman, climbed aboard the Genesis crew bus one night and sketched an idea for a self-propelled trolley that could precisely ascend and traverse a stage carrying automated computer controlled lights it was Elias who said, "Yeah. No problem, we can do that," and then did it.

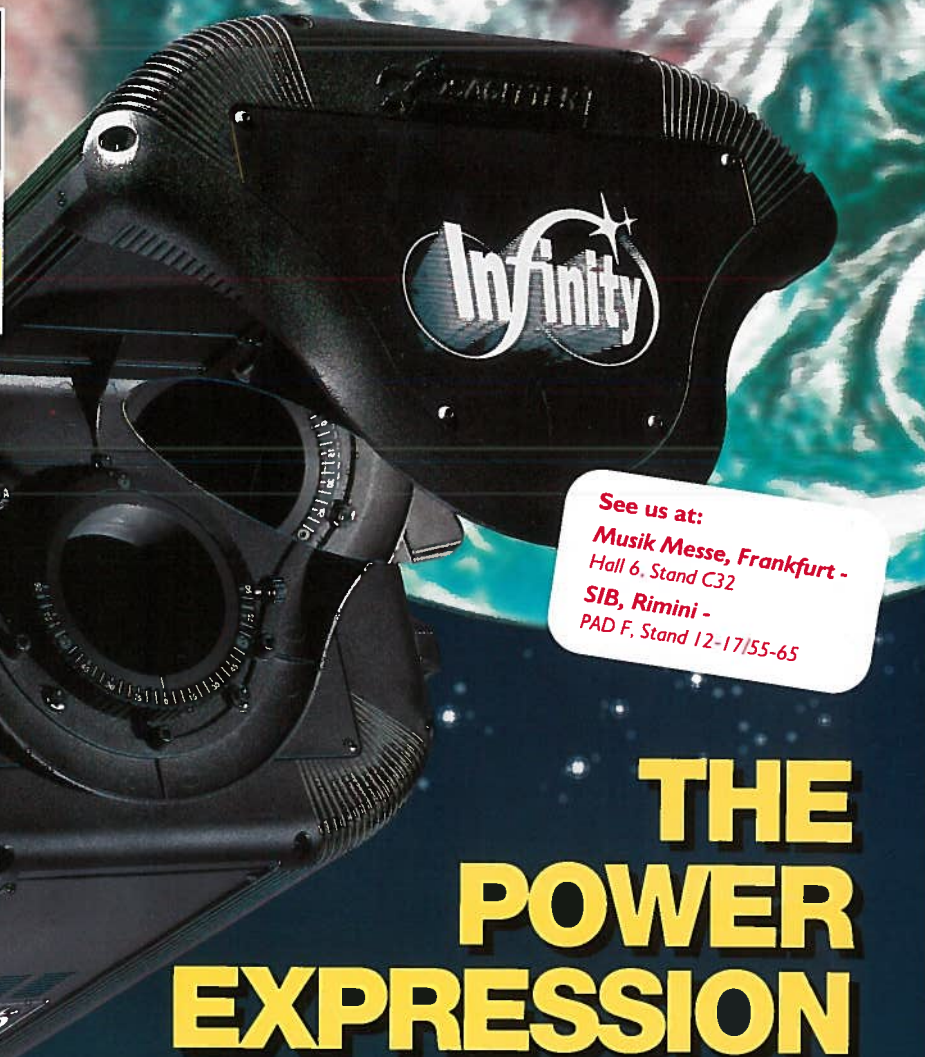
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- Variable speed strobe effect
- Instantaneous synchronizable black-out

CONTROL SYSTEM

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

REMOTE LAMP ON/OFF

- REMOTE RESET
- REMOTE SELF/TEST
- POWER FACTOR CORRECTED
- ROAD VERSION AVAILABLE



Your Lighting Partner

24060 Gorlago (Bg) - Italy - Via 1° Maggio, 16 - Tel.+39(0)35-951777 - Fax+39(0)35-951738

expand your horizons



navigator epx

*moving light console, 60 lamps plus
svga monitor output, trackball and
keyboard included*



pathfinder epx

*concert / theatre console, 60 channels
svga monitor output, chase-maker and
other effects, keyboard included*



explorer epx

*concert / theatre console, 120 channels
svga monitor output, stack-maker and
other effects, sophisticated time fades
keyboard included, optional floppy drive*



See us at:

Frankfurt Music Fair
13-17 March (LMP Stand)

SIB, Rimini
24-27 March (UK Group stand)

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