

# LIGHTING+<sup>+</sup>SOUND *International*

THE ENTERTAINMENT TECHNOLOGY MONTHLY



CIRQUE DU SOLEIL FIND THEMSELVES IN DEEP WATER WITH 'O'.

PHOTO: JOAN MARCU

- Water feature: Cirque du Soleil in Las Vegas
- Animated Tales: the Cartoon Network's big bash
- Formula 1 gets off the starting blocks
- Jools Holland: the technical crew behind the maestro of music
- Secret Lives: the DJs who came of age
- Full round-up of all the news from LDI 98 in Phoenix

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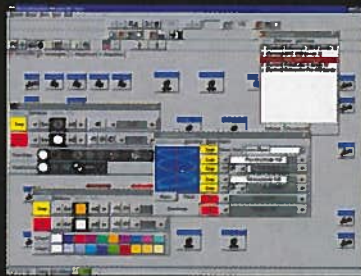
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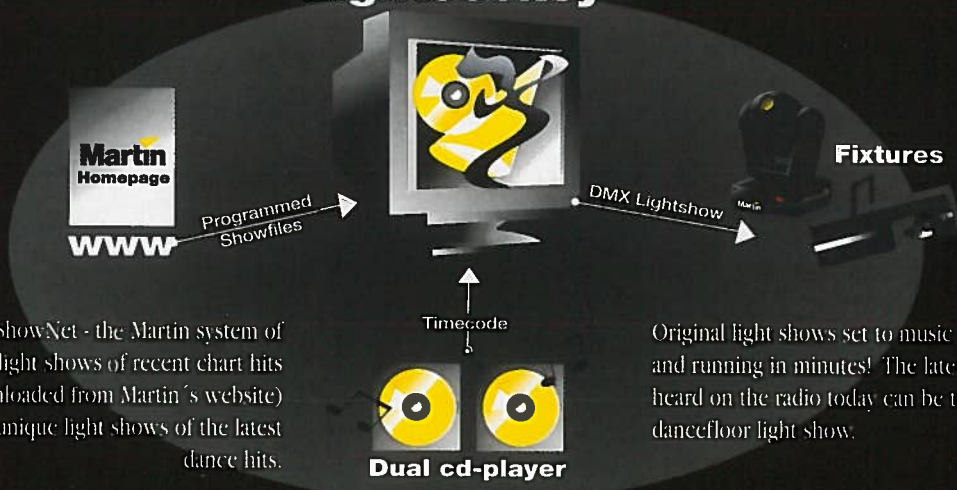


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# LIGHTING+*Sound* International

DECEMBER 1998

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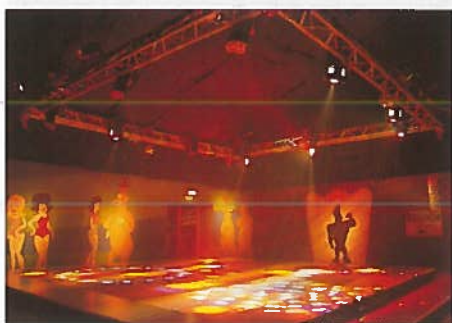
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The views expressed in Lighting+Sound International are not necessarily those of the Editor or the Professional Lighting and Sound Association



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## High End and Vari-Lite Reach Settlement

In a move that will come as a welcome relief to many, Vari-Lite International and High End Systems have announced that a preliminary settlement agreement has been reached between the two companies regarding the ongoing litigation relating to certain Vari-Lite patents. Although the terms of the agreement are confidential, the settlement consisted of a combination of a payment to Vari-Lite and the exchange of specific rights concerning the use of each other's patents. The settlement will not affect the sale or use of any current Vari-Lite or High End Systems product or service. Court approval of the agreement is expected within the month.

A joint statement issued by Rusty Brutsché, chairman and CEO of Vari-Lite, and Frank Gordon, CEO of High End Systems, said: "We welcome this agreement, and this is a very positive step for all involved. Putting the lawsuit behind us allows both companies to focus on continued development of products and services to meet the needs of our clients and the lighting industry."

See also No Comment, page 56.

## Thankyou

We would like to thank all our readers and advertisers for making 1998 our most successful year ever. To ensure that we have an even better 1999, we have some major plans to develop the look and content of not only L+S*I* (all under wraps for the present) but our full portfolio of publications. We are currently working on the largest ever edition of the PLASA Members Yearbook which will be out in the early part of next year and also available in CD-ROM format.

## Freddie Young Dies



Freddie Young seen celebrating his ninetieth at Pinewood Studios.

Cinematographer Freddie Young, OBE, died on December 1st, aged 96. He had a long and distinguished career, the highlights of which included the three Oscars he won for his work on *Lawrence of Arabia* (1962), *Doctor Zhivago* (1965) and *Ryan's Daughter* (1970) - all directed by David Lean. He also received Oscar nominations for both *Ivanhoe* (1952) and *Nicholas and Alexandra* (1972).

His career began in 1917 with a job at Gaumont Studios; it was a time when new techniques were being pioneered in cinema and where Young learnt much of his craft. In the late twenties and early thirties he worked with Herbert Wilcox, and subsequently with Powell and Pressburger before joining the Army Kinematograph Service during the war, where he directed army training films. With the close of the war, he became chief cameraman at MGM-British and in 1949 was a founding member of the British Society of Cinematographers. In 1959, he went freelance and continued to work right up until the early nineties on numerous film projects. During this time, he was awarded an OBE. More recently he had been working on his memoirs: *Seventy Light Years: A life in Movies*. The book is scheduled for publication next February.

## LSC in Voluntary Administration

Australian manufacturers LSC Lighting have gone into voluntary administration. The company, which has manufactured lighting control equipment since 1979, is behind the well known and established range of Axiom and Atom control consoles. It is also known for its range of digital dimmers, multiplexers, demultiplexers, softpatches and DMX512 splitters and distribution equipment. According to managing director Gary Pritchard, the move allows the company to continue to operate in the hope that it can trade its way out of the situation - a similar basis to that which Chapter 11 works on in the United States.


## Sewell and Mardon Go Their Separate Ways


In order to resolve differences concerning the strategic direction of the company, provisional agreement has been reached by Pulsar's Paul Mardon for a proposed purchase of Ken Sewell's share-holding in the spring of 1999.


Mardon is looking for someone to take over the financial and administrative role, but until such a person is found, Sewell has agreed to stay on during the transitional period. His future plans in 1999 are to build up Realnet Ltd - an internet and computer consultancy. Realnet's first customer will be Pulsar and the company will provide support services for Pulsar's manufacturing software system.

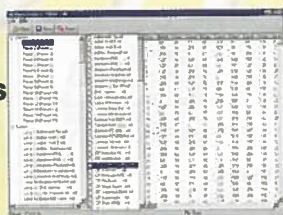
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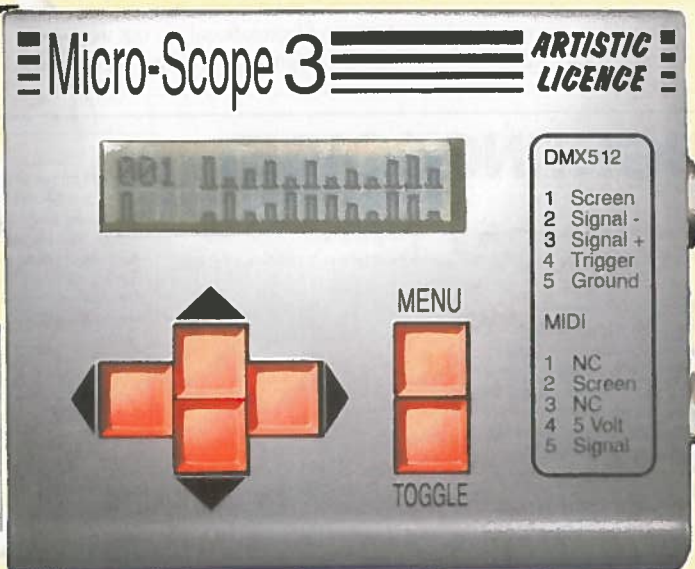
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## Now Voyager

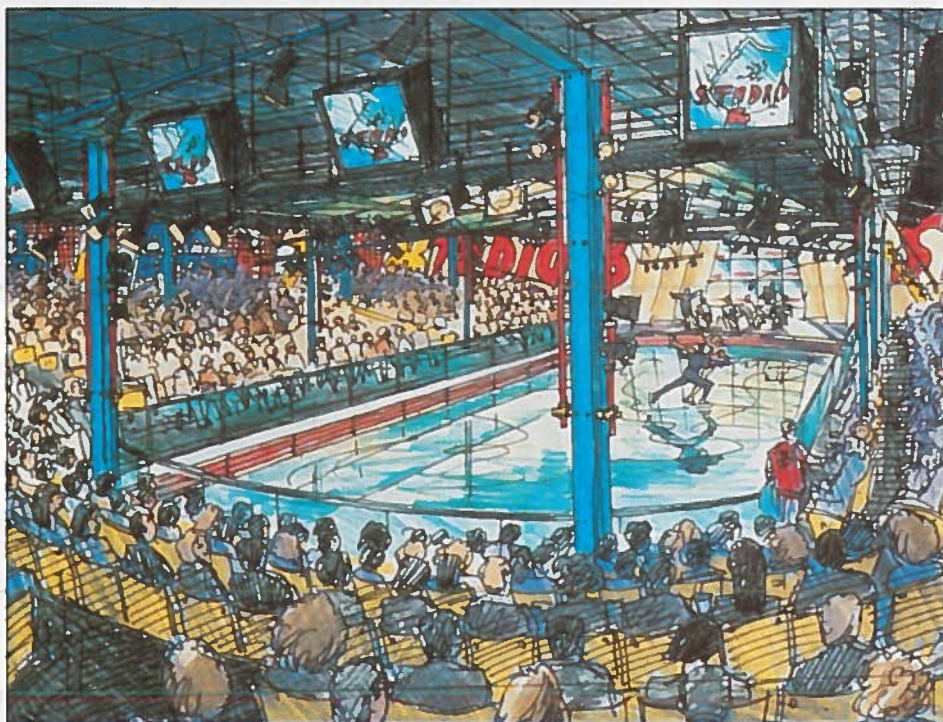
Royal Caribbean International's latest super cruise liner - the \$500m Voyager of the Seas - is set for its maiden voyage in November 1999.

The first of three new 'Eagle Class' passenger ships, the 142,000 ton Voyager, currently under construction at the Kvaerner-Masa shipyard in Turku, Finland, will boast recreational facilities never before seen on cruise ships. Glantre Engineering has been awarded the contract to carry out the design, termination, testing and commissioning of lighting and sound equipment and will be working on two venues within the vessel: The Royal Promenade will be four decks high and the length of four football fields, punctuated by two atria ('the Centurms') up to 11 decks high. The 'streets' will comprise restaurants, entertainment areas and an impressive range of speciality shops and bars.

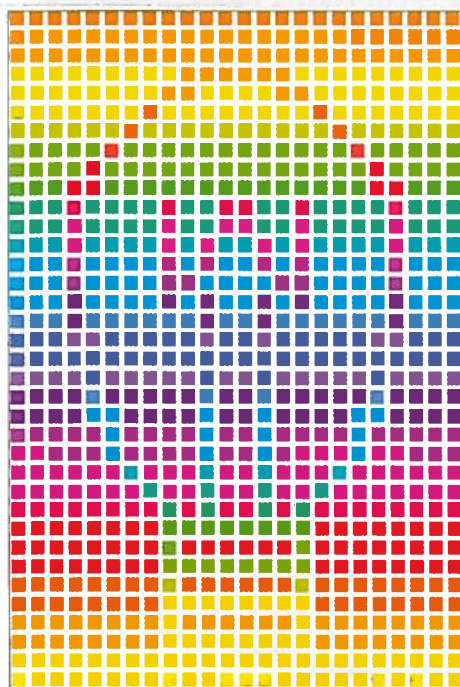
Glantre's contract involves the installation of lighting, sound and a custom motorised lighting truss for the atrium, designed by Glantre's Stage Engineering Design office in Newmarket. Theatrical lighting will be used to create atmosphere as darkness falls, with control through a Wholehog II console, and sound effects mixed through a Yamaha desk.

The second area will be Studio B, a 900-seat arena and ice rink, which will include an ETC Expression console, EAW and Clair Brothers loudspeakers, a Richmond Sound Design Show Control system and another Wholehog II console.

Both the Royal Promenade and Studio B will benefit from ETC Sensor dimming, Wybron colour scrollers, Martin Mac 500s, a Gray Interfaces DMX routing system, a Sennheiser IR system, Shure radio microphones, Clearcom intercom and Studio Color and Cyberlight luminaires from High End Systems.



Above, Voyager of the Seas' arena and ice rink in Studio B and below, the Eagle Class cruise ship.



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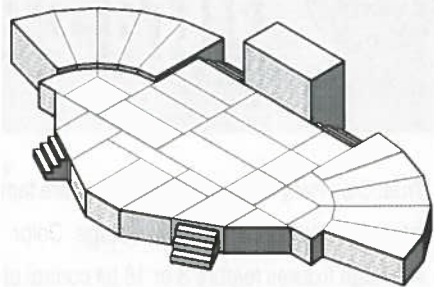
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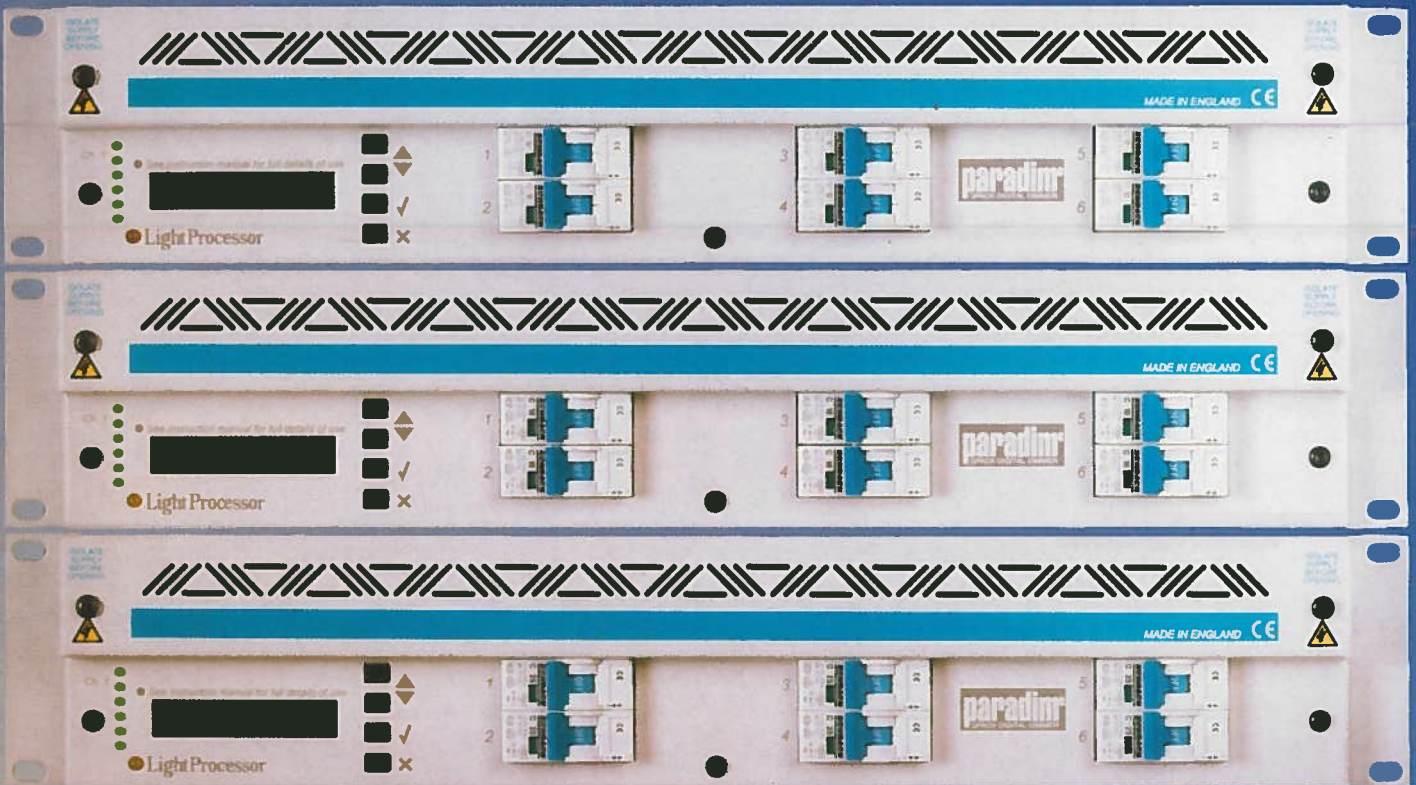
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paradigm (pàr'é-dim') noun - An example that serves as the pattern or model for the rest.

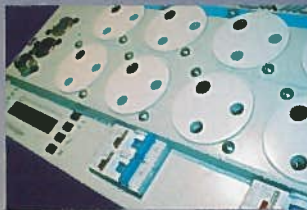
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## Imperial College Open New Venue

CP Sound played a key role in the audio and lighting installation for the recent expansion and refurbishment of dB's, the main entertainment venue at Imperial College Student Union in Kensington, London. CP Sound have enjoyed a long and fruitful working relationship with Imperial College, stretching back to when the first system was installed 12 years ago.

The high-tech designed venue now has an increased room capacity of 700 - making it the largest student venue in central London. The stage has been moved 90 degrees and lengthened, and dB's now has its own bar and toilets, enabling it to open independently of any other part of the student union building in which it resides.

All existing lighting and sound equipment was ripped out of the venue, cleaned, re-tuned and re-fitted in the new re-oriented format. New audio equipment includes four additional RSE CC1500 bass amps and two CP Sound custom-designed bass bins. These are loaded with 600W Beyma 15" drivers giving dB's a new total of eight CP Sound bass bins totalling 4.8kW of bass. This was necessary because, despite the room expansion, Imperial required the same pumping bass levels at the same SPL. The eclectic entertainment programme features a myriad of events which will tax the sound system to the full.

The top cabinets have also been increased to six. The old ones have been replaced by CP custom-designed and constructed models based on the originals but streamlined for performance. dB's top end is driven from the original bass amp and mid range amp - both C-Audio - giving a total of 2.4kW of top end.

CP Sound also fitted a Formula Sound Sentry noise limiter to the existing AVC2 and CX4 limiters. The Sentry oversees live music on stage, controlling power to the 13A ring main sockets at the rear of the stage and at the PA mixer position, next to the newly installed sub-floor 32-way multicore and cutting in when bands top exceedingly high volumes. The AVC2 is designed to prevent the disco sound system being overdriven, and the CX4 interfaces with the fire alarm in conjunction with the disco system. There's also a Formula Sound PM 90 disco mixer in the DJ booth. Additional lighting fixtures include two High End Systems Technobeams which join the HES Trackspots from the previous installation. Eight colour-changing luminaires are also new; these are controlled from a Pulsar Masterpiece 108 to which CP Sound have added a Masterpiece Replay Unit and two Pulsar Status Outstations which work together. The semi-circular trussing, which matches the curved contours of the room, was moved by CP Sound to the new stage position.

Russell Evans managed the installation for CP, working with Imperial's entertainment and marketing manager Mark Horne. The project was co-ordinated by architect Mary Marsh from the Imperial's Estate Design Office.



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## News Shorts

MTFX have purchased sole manufacturing and distribution rights to the Big Green Foam Machine (BGFM), formerly manufactured and distributed by Weird Dream Productions.

Bob Walters and Bob Rooke, both formerly of Creative Technical Systems, have recently formed a new installation company for the leisure and bar industry. Leisure Installation and Service can be contacted on +44 (1623) 655317.

Wet Wet Wet have recently recorded new songs for their album using, almost exclusively, a wide variety of Sennheiser microphones including the new Evolution high performance dynamic vocal and instrument models.

## Harmer Hits 18



Lesley Harmer (right) with Fred Foster of ETC.

A mini-PLASA took place in Fitzrovia this November when PR agency Harmer Public Relations celebrated its 18th birthday at a party in a wine bar near the agency's offices in London's W1. A host of clients past, present and future, members of the press, colleagues and friends joined PR consultant Lesley Harmer and her team to celebrate 18 years of Harmer PR. Having just recovered from LDI, a number of familiar faces from the world of entertainment technology joined in the celebrations, along with non-theatre clients from the diverse worlds of Loss Adjusting and Needlecraft! Harmer PR began in 1980 and has grown significantly, as the entertainment technology industry has expanded, working with companies such as ETC Europe, Glantre Engineering, Maltbury, Rosco, and Triple E.

Footnote: It has come to our attention that such was Lesley's largesse on the night, that most of those at the party were in no fit state to make their way home and two party animals (who shall remain nameless) were to be seen looking bleary-eyed at Brighton railway station at 4 o'clock next morning.

## Hot in November?

There's been a huge upsurge in touring activity this autumn: compared to the spring, companies are calling it a positive glut. To underscore just how busy the season has been, Lifting Gear Hire Rigging Services have seen turnover in the sub-hire sector quadruple compared to this time last year.

"We currently have equipment out on all manner of shows, supplementing the rigging gear of our customers in the touring industry," said LGH Rigging Service director, Andy Tinnevel. "We're working on Blondie, Paul Weller and Tom Jones for example, and also the series of mega shows Garth Brooks has just done in Belfast."

And it's not just touring work; LGH recently shipped several tons of lifting equipment to Milan for Blackout, the UK specialist drapes company, to dress the MTV European Awards Show. "This is exactly our function," said Tinnevel. "When things get really busy companies can either buy in more stock, or rent. Buying doesn't always make sense, especially when your core business is lighting, sound or video. Renting used to mean giving some of the pie to a potential competitor. With our in-depth rigging resources we can easily help take the strain when a service company's existing stock comes under pressure. In the last six months we've rented rigging gear to all the leading rigging service companies - Star Rats, Unusual, Vertigo, Summit, and Ocean State. Sales too have not been slack, most recently LGH supplied over £90,000 worth of hoists and peripheral rigging to Gearhouse Group for their new giant tensile fabric structure.

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# Source Four

# Zoom



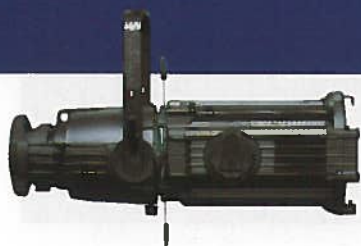
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## Jaguar S-Type and Ford Focus among Launches at UK Motor Show

The recent UK Motor Show at the NEC in Birmingham featured hundreds of exhibitors, including every manufacturer that you could think of. Unusually this year, there were not the traditional numbers of major shows and product launches that normally come with the high budgets of motor industry exhibitions. However, two product launches that did occur; Ford with their new Focus model and Jaguar with their new S-Type, didn't hold back when it came to the crunch.

London-based Imagination designed the massive Ford stand, which was split into two major parts, one containing the main showroom and featuring an extensive display of their product range, including the new Ford Focus and the second containing an arena-style auditorium. Needing additional space that the NEC could not offer, Imagination brought in Edwin Shirley Staging to supply the structure to house the arena section of the stand. The free-standing structure, measuring 47 x 31m and with a trim height of 16.5m, was placed alongside the NEC, where a walkway was fabricated and then placed between the two buildings. Inside, the structure was then fitted with a revolving stage and grandstand seating for 350 people, with the lighting, sound and video system being flown above it along with a few suspended cars for good measure. Over the two week run of the show, Birmingham suffered some of the worst storm weather it had seen for many years, with winds reaching speeds in excess of 50 miles per hour. Despite this constant battering, the ESS structure was completely undisturbed, and spectators inside were completely unaware of the storm



erupting around them. UK-based Unusual Rigging looked after all of the rigging within the structure, under the supervision of Imagination.

Imagination's lighting designer, Steve Latham, used conventional and Vari\*Lite fixtures to light the stand, with 24 VL5s, 24 VL5 Arcs and 56 VL6s, along with a total of almost 200 conventional fixtures. The programming of the stand was the job of Patrick Murray who used two Wholehog II consoles, each with an extension wing and wired remote control. In addition to the lighting, Chris Slingsby and Lee Mundon from Imagination looked after the still projection using a combination of Pani BP4 and Kodak projectors, whilst bringing in Creative Technology for the video projection. The audio requirements were supplied by Orbital, under the supervision of Imagination's designer John Del Nero.

In an adjacent hall, one of the more spectacular events was the reveal of the new S-Type Jaguar.

Centred around a large cylindrical structure, decorated by the famous cat in full leap, the reveal lasted around 15 minutes as various elements of the show slowly took shape whilst videowalls on either side showed related coverage. With a crescendo of music, all attention was drawn to the giant Jaguar statue as it slowly retreated into the structure, making way for the S-Type to rise up through mists of smoke and take its place in a blaze of lighting effects. Spectacularly, the car then began to rotate on its 45-degree angle, whilst washed in colour and patterns from the assembled lighting rig.

The lighting designer for the reveal was Durham Marengi, who used VL7, VL5 and VL5 Arcs, along with Par 16s and other conventional fixtures, with programming by John Sinden on a FPS Wholehog II. In the weeks approaching the opening of the show, Marengi took advantage of the WYSIWYG programming suite at the VLPS office in Greenford.

With both LDs owning copies of WYSIWYG, much work for the event could be carried out off site. They were then able to meet in Greenford to pre-programme the show, which allowed for complete secrecy of the whole reveal sequence. With pre-programming complete, the system was then transferred to the NEC ready for the grand launch. With the real lights in the air, Sinden fine-tuned the focusing of the fixtures before running the show with the time-coded soundtrack.

As for the show itself, well due to its sheer size alone, it's almost as good as the PLASA show for catching up with old friends who you haven't seen for a while. Roll on next year.



Design consultancy OneWorld designed and produced the Concept Cars of the 21st Century visitor experience at this year's Motor Show. OneWorld were commissioned by SMMT to develop the feature which brought together over 35 concept cars. Housed in a 5,000sq.m blackbox auditorium, the attraction featured a 30-minute multimedia presentation using 24 screens and 50 projectors. The set elements were provided by Blackout (rigging drapes) and Scena who handled the scenic construction. Creative Technology and Dimension Audio supplied the AV and sound kit respectively, whilst Essential trumped up the lighting. Jonathan Howard of DHA designed the lighting and Julian Scott, the sound.



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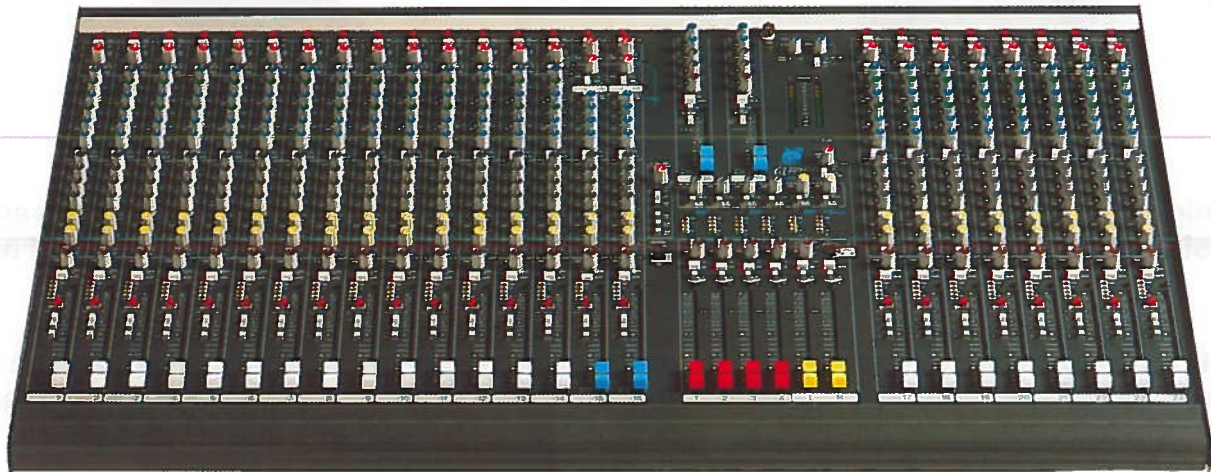
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## From Abraxus to Avant Garde



Back in September 1972 a purple and yellow trailer slunk out of a yard in East Ham with a load of foreign goodies and a couple of guitars belonging to one Carlos Santana. Arguably, it was the start of rock and roll touring as we know it today. Over a quarter of a century later the same thing is happening; the only difference these days being that Santana requires two extra trailers.

Historical ties are a strong influence and it's a common assumption that Edwin Shirley Trucking's business is centred upon servicing the - shall we say - more mature artiste. Look at the current roster of tours - beside Santana they have Page & Plant and Tom Jones on the road - but they haven't just bought six new Mega-cube trailers, four DAF tractors and several smaller vehicles just to service the elder statesmen of rock.

In a reflection of the modern showbiz industry, EST have trucks out with 'Mulan' the new Disney promotion, British Telecom, Riverdance and British Aerospace. Even then it's not just 'industrials' and stage shows that take up the freight space; you'll also see ESS's livery out on L Ron Hubbard's Church of Scientology, and the 'Masters of Grace' tour by avante garde composer Philip Glass. Rumour has it Glass is contemplating a new composition, 'The Purple and the Yellow.' Now there's something for a driver to get excited about.

## Further Expansion for PRG

At the risk of becoming mistaken for the PRG newsletter, L+SI has yet more to report on the activities of the PRG Group. The Group has acquired California-based television lighting firm, Production Lighting Systems, Inc. This is the first company within the television and film lighting market to join the PRG Group. Founded in 1988 to fill a need for rental equipment in the TV and film marketplace, PLS is widely recognised as the market leader in the field in California. As is the practice at PRG, PLS will continue to be operated by its successful leadership team - David Lechuga, executive director of marketing and production liaison, Tony Ward, director of special events and Roger Gordon, director of operations, will work closely with president Jim Riendeau at the company facility in Glendale, California.

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## NEWS Shorts

**Canford** have been appointed the UK distributors for Maycom, the Netherlands-based manufacturer of digital audio systems for the broadcast market. Maycom's latest offering, the Easycorder - a new generation portable PC card recorder - was given its UK premier on stand at SBES.

At their recent annual awards night, the Disco In Shire Counties DJ association presented **NJD** with two awards for the second consecutive year! Having scooped the awards last year for 'Mobile Lighting Effect' of the year for their Predator intelligent lighting projector and as 'Manufacturer of the Year 1997', the company were delighted to receive a further two awards for 1998. This time for 'Best Mobile Lighting Effect 1998' for their Chaos Auto moon and again for 'Best Manufacturer 1998'.

## Light in the Stadium of Light

Bolton-based Francis Searchlights Ltd have confirmed an order for four 7kW Xenon searchlights by Sunderland Football Club. The deal, which is worth in excess of £45,000, is for the company's Stardrift searchlight, originally designed for the British 8th Army during the Gulf War, and powerful enough to allow a person to read a newspaper by its light at a distance of over 10 miles.

Sunderland intend using the searchlights as a permanent installation on top of their new state-of-the-art ground, appropriately called the Stadium of Light. Jonathan Hilton of Francis Searchlights told L+S: "Sunderland FC wanted something simple to operate but at the same time rugged enough to survive for 10 years in all sorts of weather conditions. We've been building



searchlights since 1901; we're a Ministry of Defence-approved Design Authority, and we make our kit to last."

The football club derives a considerable amount of revenue from corporate events, so when the searchlights aren't intimidating the opposition during home games, they'll be earning their keep on other nights, by playing to the corporate market.

## White Light Wednesdays

*White Light* welcomed award-winning lighting designer Rick Fisher to their Fulham headquarters recently as part of their White Light Wednesday Workshops.

The series of workshops, which started in the spring of this year, are intended to allow anyone to visit on

a Wednesday morning and learn about the latest techniques, equipment and technology. Every week a different subject area is featured, such as the latest automated lighting technology or the background to DMX512.

Rick Fisher's presentation was

entitled *Lighting Design for the Theatre*, and covered both the art of lighting and the practicalities of earning a living as a theatrical lighting designer.

Anyone interested in attending the workshops should call White Light on 0171-731 3291.

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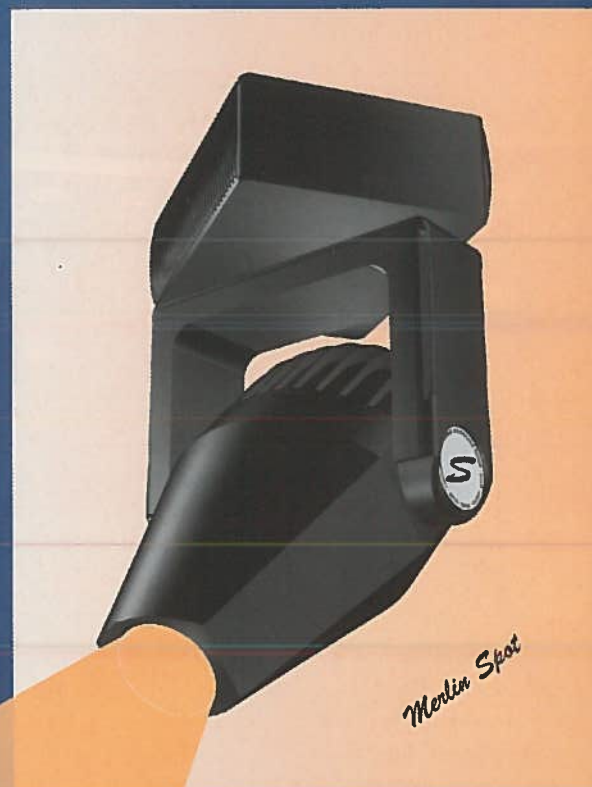
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## Newton System's World Premier in Amsterdam



A newly-developed loudspeaker system has been debuted at the Amsterdam Arena, for the sixtieth anniversary celebrations of the Dutch magazine 'Margriet'. The system was commissioned because existing conventional systems were deemed to be inappropriate for the event.

Loudspeaker manufacturer Stage Accompany and Johan van der Werff from acoustic consultants Peutz were given six months in which to produce the system. Design specifications for the event were high: a central stage, no speakers within sightlines, perfect speech intelligibility and live concert reinforcement, with sufficient and equally dispersed sound pressure on every seat.

The Newton System (so called because the columns hang directly vertically under the influence of gravity) consisted of a series of mid-high speaker columns (6m and 7.5m high) flown in vertical lines, interspersed

with 20m high bass columns, each consisting of 17 dual SA 15" driver loaded cabinets. See-through waveguides, constructed from transparent polycarbonate, were developed to aid dispersion while keeping sightlines as clear as possible. According to Stage Accompany, the system managed to produce an even 103dB on every seat in the Arena, with excellent speech intelligibility and music reproduction.

Each cabinet is individually controlled, with a new algorithm for filtering of time/phase and frequency response by a 48-channel DSP processor/interface. A total of 61 amplifier channels were used for the concert.

The fully modular design of the Newton system means that it is flexible enough to be adapted to virtually any space, and the system is expected to appear at a number of high profile events throughout Europe in the near future.

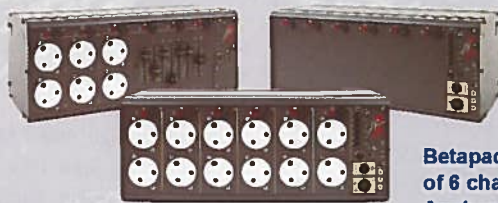
## NEWS Shorts

PJ Lighting (products), manufacturers of lanterns, rigging equipment, lighting and speaker stands, have moved and can now be contacted at Unit 13 Brookvale Trading Estate, Moor Lane, Witton, Birmingham, B6 7AQ, UK. Telephone 0121-356 7333.

Theatre sound design and hire specialist, The Sound Company, has recently expanded its stock of mics for choral and classical applications. In addition to a complete set of Crown CM31 suspended choir mics, a variety of mics from Accusound, Neumann, AKG and DPA are also available for hire.

Metropolis Lighting run by lighting director David Hurley, which specialises in designing and directing lighting for television, has recently purchased 72 ways of new Avolites ART dimming. One of the first outings for the new dimmers was the Sky Box Office OB for the recent Spice Girls gigs at Wembley.

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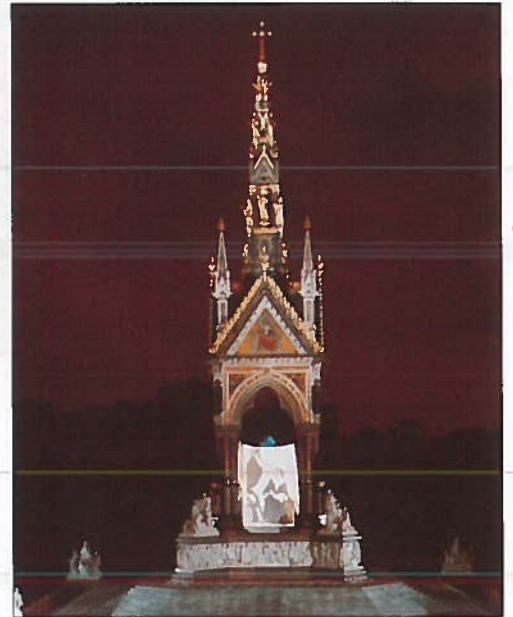
## VLPS Opens in Middle East

In response to increasing demand for their services in the Middle East, Vari-Lite International Inc have expanded their VLPS operations into Dubai in the United Arab Emirates. The new facility - a 15,000sq.ft warehouse and office - marks the latest in a growing number of VLPS sites around the world. VLPS Dubai, sponsored by Kingstar International, will serve the Arabian peninsular comprising the UAE, Saudi Arabia, Oman, Yemen, Somalia, Iran and Iraq, as well as India, Bangladesh, Pakistan, Afghanistan, Kasakistan, Uzbekistan, Turkmenistan, Lebanon, Egypt and East Africa.

This new office provides clients with a full lighting production service including access to Vari\*Lite automated lighting products, conventional lighting and control systems and Sky-Trackers, as well as rigging, crew and support equipment.

The company has built up strong connections with the Arab world over the years by providing lighting services for the Royal Family, major corporations (including Jaguar) and for the Oman National Celebrations. Adrian Bell takes on the role of general manager for VLPS Dubai and has 11 years experience with the company, including running joint Vari-Lite/Theatre Projects warehouse operations.

## Albert Memorial Projection



Production Arts supplied four large-format Pani projectors (two 4kW HMI and two 6kW HMI) with AMD-32 automatic slidechangers for the re-opening of the Albert Memorial ceremony in London.

The Memorial, dedicated to Queen Victoria's husband Prince Albert and originally completed in 1876, was re-opened by The Queen during an extremely high profile ceremony attended by hundreds of dignitaries.

The 6kW projectors were mounted on the balcony at the front of the Royal Albert Hall, shooting over 100 metres across the road onto the Memorial which stands in Hyde Park. The 4kW projectors were rigged on scaffolding towers either side of the Memorial.

Over 100 slides were used in the 20-minute opening show featuring archival material of the Memorial and photographs detailing the restoration. The slide show was designed by Robert Ornbø, also lighting director for the event that was produced for English Heritage by Major Michael Parker whilst production was handled by Unusual Services.

The 200ft high Albert Memorial was first declared unsafe in 1983. Since 1990, it has been covered by the largest free-standing scaffolding structure in Europe. Renovation of this seminal monument began four years ago and has involved the removal of over 6000 pieces of the structure including 120 tonnes of lead that covered the spire. The project has been completed, under the direction of English Heritage, at a cost of £11.2 million - a year ahead of schedule and nearly £3 million under budget!

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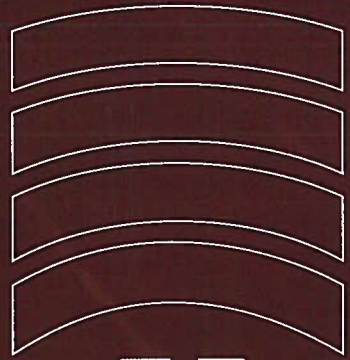
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## C Audio Amps Power New Multiplex Cinema



C Audio amplifiers are at the heart of a unique multiplex cinema installation which has taken place in Corinth in Greece. C Audio's GB Series are featured in all three theatres at the Cineplex 3, where Athens-based contractors Acoustiki carried out the audio installation. The flagship is the Dolby surround sound cinema, where two GB 402s (each 2 x 400W), two GB 202s (2 x 200W) and a GB 602 (2 x 600W) amplifier have been deployed. In Screen 2 a further pair each of 402s and 602s are in operation.

However, the requirement for the sound system in Screen 3 was portability, because in the summer months it will be transported to the 150-capacity LAIS outdoor cinema, situated less than 1km away. For this purpose, two C Audio ST400i amplifiers and an ST600i were specified.

The company have also been busy elsewhere in Greece. In addition to their cinema work, five ST400i and five ST600i amplifiers now run the sound system in a public theatre in Volos, installed by locally-based company ABC.

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## TiLEZone in London

Andrich International, organisers of the annual TiLE exhibition and conference, are to present the first TiLEZone at the London Parks and Attractions Show. The Zone will feature many of the elements of the TiLE show and there will be a number of free presentations led by industry experts running throughout. These include presentations by Ray Hole, a director of KSS Architects, who will lead the discussion on Theming & Design; David Needham of SimEx will talk about simulation; Bradley Reed of Sardis International will consider sound; Nick Farmer of Farmer Studios will talk about animatronics and Peter Ed of ETC Europe will talk about lighting. For further details about the show, which runs at Earls Court Exhibition Centre from Tuesday 26th to Thursday 28th January 1999, contact Monica Yam at TiLE on 0181- 446 2146.

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## Christmas Wishes from the Everyman Theatre

Down at the Cheltenham Everyman something is stirring. It's not an earthquake, even if the beautiful plaster cupola is cracking and the 'wedding cake' boxes are sinking, but it could be an underground movement. What is this compelling force which has encouraged a sound designer of successful West-End musicals, an Asian Disco DJ, a conference company based in South London and the directors of no less than three rock and roll sound hire companies (the fourth couldn't make it), plus assorted freelance sound engineers, and designers to congregate in a relatively inaccessible corner of the UK?

The answer is physics, or rather the laws of physics - the inverse square law, for example. Why is that important? Because it's worth drawing attention to such a law when justifying why you'd want to mount a radial horn tilted down eight degrees from square in a full range 90° dispersion cabinet.

The more important law of physics is this, and it's one that was backed up by Mick Potter (sound designer for *Saturday Night Fever*): "You can use all the technology you want, but in the end you have to stand back and listen to what you're actually producing. Even if the machine tells you such and such is flat, doing this, or can't be doing that, you have to say, 'well maybe that's a false reading' and rely on your ears."

So like a group of engine drivers on a day trip to the Bluebell Line, all these various sound men had come down to a small provincial theatre to listen to audio gear. But whose? (You've been given the clue, now go figure - OK, maybe it's too hard, the speaker company in question is d&b audiotechnik and the demo at the Everyman was of their entire range of products).

But why? "We're just giving people the opportunity to play with and compare the different products in our range," explained Sally Grainger of d&b. "For us it's a chance to explain the theory behind our development strategy." None the wiser, I went and asked the assembled throng, rhetorically speaking - why are you here?

Saul Eagles of Stage Electrics: "We're finding this equipment is increasingly spec'd, especially for theatre tours. For our existing clients we sub it in, but it's not a system I've used before myself. I wanted to find out more about it." Rick Sarson, once a luminary in the constellation that is Autograph, now a freelance engineer, was more



Moni (Original Flavour, W London DJ Hire) with Sally Grainger (d&b UK) and Dick Hayes (Entec).

direct. "For me it's more about having the opportunity to feed back niggles and gripes."

This just two hours into the demo' and following a passionate debate about using focused, directional devices in theatre for dispersed arrays versus Martin Levan's approach of hanging bare speakers - no cabinet - around the auditorium producing virtually omni-directional reinforcement. (Consensus was reached that both worked, but that Levan was/is brave to have tried his way in the first place).

Answers to direct questions was what Dave Guerin (monitor man for Embrace and Skunk Anansie) had in mind, though his was more an engineer's wish list. "How about an amplifier that can detect what speaker type has been plugged into it and can then reconfigure the control card within it automatically? That's a 'plug it in anywhere and throw it up in the air' PA system. Further to that, what's then needed is an infra-red remote: walk the room, listen to the array, be able to point at any individual speaker with your remote, access its control and modify delay, EQ, gain whatever." Guerin is nothing if not demanding.

What was interesting from a journalistic perspective was that here was a group of individuals from within the same industry. Some were from different market sectors granted - and several indeed were major stock holders in other audio products - but all could expect at some time in the future to overlap into one another's territory, and in a competitive fashion. Yet the free flow of information, critical or positive, and the sharing of ideas, was clearly easily made. I wonder how often the directors of Avis, Hertz and Europcar all sit around the same table and share ideas? Of course the Law of Physics states that 'Opposites repel', let's hope no-one tells them.

Steve Moles

## People News

Following on from the news in last month's L+S of the departure of **Richard Belliveau** from High End Systems, the company have now confirmed **Mike Wood** as vice-president of engineering, in which role he will be a part of the executive management team with responsibility for overall direction and operation of the company. **Steve Tulk**, who has spent 14 years with HES, will assist Wood as senior engineering director. At the same time, **Grif Palmer**, former sales director, has also been promoted to vice-president status.

DHA Design Services has appointed lighting designer **Jonathan Howard** as director. The change sees Howard, who has been with the company for four years, joining the board with Adam Grater and David Hersey. Meanwhile, **Philip Nye**, chief engineer at DHA Lighting Ltd, who lists the DHA Digital Light Curtain and Digital Beamlight 2 among his creations, is heading a new company of electronic design consultants. Named Engineering Arts, the company offers services ranging from advice to detailed product design throughout the field of performance engineering.

**Marco van Beek** has left Vari-Lite Production Services to start his own company, Supporting Role Ltd. The new venture will provide support services and resources such as project management and consultancy, covering areas such as health and safety, CE marking and quality assurance, as well as technical and business issues. Supporting Role can be contacted on (0788) 770 3604.

Trantec have recruited **Tim Riley** to their sales force following the launch of the IEM 500 in-ear monitoring system. Having previously worked with Korg UK, Trace Elliot and beyerdynamic, Riley will now join the sales team at Trantec, covering Northern England, Scotland and Ireland.

## Goodbye Freddy

After a successful 18-year partnership at Zero 88, **Freddy Lloyd** has finally retired from the company although he will continue links with Zero 88 on a consultative basis in 1999, and will no doubt be around at the major trade shows next year. The PLASA office would like to join the staff at Zero 88 in expressing their thanks to Freddy for his contributions over the past 18 years, and wish him well for the future.

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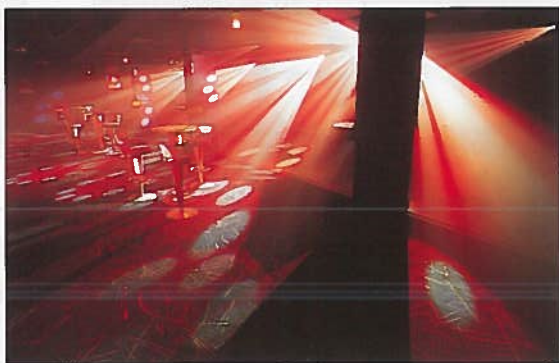
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## Pulsar's 5th Avenue Launch of Software Upgrade

Pulsar have recently released a new software upgrade for their Masterpiece 108. The upgrade has more than doubled the number of channels available on the desk, ensuring that current users who upgrade will now have the power to cope with the demands of high tech lighting systems, and with no cost attached. One of the first installations of the new software came on Pulsar's home territory in Cambridge at the town's 5th Avenue nightclub, where a redesigned interior and new lighting rig are proving the ideal place in which to demonstrate the advantages of the software upgrade.

The club is one of the key haunts of the large student population of the city and the revamp just prior to Christmas will, no doubt, tease from them yet more of their grant money. The new rig includes 13 of the latest Clay Paky Stage Light 300s, four Clay Paky Mini Scan HPEs, a single Clay Paky Astroraggi Power and eight Pulsar Monster strobes. For 5th Avenue, the upgrade on the Masterpiece 108 means that the club can enjoy the benefits that the new 256-channel DMX patch software upgrade offers. The desk features a DMX patching system that allows the standard 108 DMX channels to control up to a maximum of 256 DMX control slots - particularly useful when controlling large numbers of intelligent lighting fixtures.

Why the use of the word 'slots'? Well, it's expected in the next revision of the DMX



The revitalised dancefloor at 5th Avenue in Cambridge (above) and Pulsar's design schematic for the rig (below).



standard, that the term 'dimmer levels' will be renamed 'slots', since DMX is now used to control many parameters beside dimmer levels.

The upgrade is available to all Masterpiece 108 customers free of charge - you know who to call!

## PLASA Attracts DTI Trade Funding

The Department of Trade and Industry has made a major pledge in overseas trade development funding to the Professional Lighting and Sound Association (PLASA). Through PLASA, companies involved in lighting, sound, audio-visual and related technologies within the entertainment, presentation and communications industries will be able to use DTI funds to gain stature in developing overseas markets such as China. Matthew Griffiths, managing director of PLASA, elaborates: "Companies wanting to explore overseas markets or expand their existing overseas client base will be able to apply to PLASA for grants to exhibit at 'Pro Audio & Light Asia 99' in Singapore next July. In addition, the 'PLASA Presents Light & Sound Shanghai 99' trade show next April is now in its second year of DTI Sector Challenge funding and provides an unparalleled opportunity for UK companies from the entertainment technology sector to move into the Chinese arena. The UK seminar programme at the Shanghai event will also be funded from DTI coffers.

"PLASA was instrumental in gaining sector recognition for the entertainment technology industry by the DTI in 1997, and our mission statement is to develop and promote all aspects of the industry on a global basis. We firmly believe that our aims are very much in line with the Government's wish to take full advantage of trading opportunities with the rest of the world."



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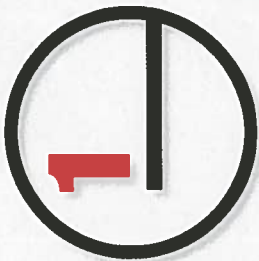


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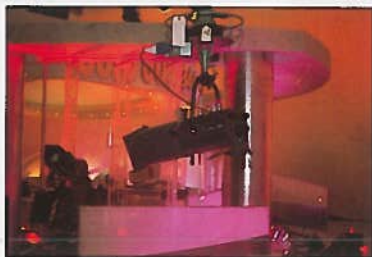
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## YTV Choose CCT

Yorkshire Television have updated their range of 2kW Silhouettes with luminaires from CCT's Freedom range. The decision fell to Peter Hardman, a respected television lighting director at YTV, who was attracted by the Freedom ranges' features such as the rotatable and



easily changeable lens tube, and its clean gobo projection capabilities, even at the widest angle (28°-58°). Originally opting for the 600W versions, Hardman's decision changed when CCT launched the 800W Freedom fixtures, which were subsequently installed at the Leeds studios. Freedom luminaires can now be found at Border Television, Granada Television and Tyne Tees Television studios.

## Action Lighting Out, Lighting Technology In

The Lighting Technology Group has announced that from the 1st January 1999, Action Lighting Manchester will be known as Lighting Technology.

The change of name will formalise the pattern which was naturally occurring between the Lighting Technology London office and Action Lighting in Manchester - which has been acting as the northern branch of Lighting Technology, offering the same range of equipment and services as its London counterpart.

The Manchester branch will be hosting an open day on 22nd January 1999 for its clients and suppliers. On display will be the ARRI theatre, studio and location lighting product portfolio.

## Prolyte Celebrates

Prolyte Products, the Dutch truss manufacturer, recently celebrated the official opening of their new production facility in Leek, in The Netherlands.

To mark the occasion, the company invited dealers, suppliers and friends from all over the world to join in the celebration, which included guided tours of the fully-operational production plants and new headquarters building. Part of the main storage building was remodelled for the day, to include bars, dining areas and stages, and the 400+ guests were treated to an impressive laser show in the evening, produced by Dutch laser company DTL.

Live music was provided by local band 'The Swinging Soul Machine' and the police played their part by blocking off the roads outside the premises for a large-scale fireworks display that closed the day.

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## Explosive Sounds!

A five-show, laser-clad, fireworks display held at Alton Towers can rightfully claim to be the UK's biggest event surrounding the November 5th fireworks celebrations. Over 20,000 people descended on the theme park each night to see the display, which this year was themed to show the fight between good and evil.

Star Hire's Sid Rogerson was the main sound engineer, who was charged with ensuring that the many aspects of the show were heard clearly throughout the site. He spec'd 12 stacks of Turbosound Flashlight per side with an extra four Floodlights as near-fills for the main left and right system. There were delay stacks of four Floodlights and bins, and an additional four Floodlights and bins firing back into the arena for surround-sound. Then there were a further two delays of TMS 4s all running through Brook Sirens and C Audio amplification.

The delay masts were a unique aspect of the kit. These are not tower structures, but a central mast of 12" heavy-duty truss, with a sliding corner block which is part of the Star Hire Star Grid system. Rogerson also used a Soundcraft Series 5 mixing desk, and LMS 700s throughout with an Outboard Electronics QP4 Quad panner.

## APIAS Joins World-ETF



APIAS, the Italian entertainment technology trade association, has been officially accepted as a member of the World Entertainment Technology Federation (World-ETF). The announcement was made by the existing World-ETF members - ESTA from the US, PLASA from the UK and VPLT from Germany - at the recent LDI show in Phoenix.

The World-ETF was initiated by its three founder members in 1996 to facilitate the exchange of information across the entertainment technology industry worldwide, via the leading trade associations operating in the sector. The Federation actively seeks to involve like-minded associations in this sharing of information, to bring increased benefits in areas such as standards and training to the industry as a whole.

Pictured above on the World-ETF booth at the recent LDI exhibition in Phoenix, Arizona, are (left to right): PLASA chairman Paul Adams, ESTA president Mike Wood, Augusto Andraghetti of APIAS, Lori Rubinstein of ESTA, Eckart Steffens of VPLT and Paul Vincent of ESTA.

## Custom Solutions

More and more theatres are looking for customised solutions to allow them to host touring productions of large-scale musicals.

In such productions, rather than working with a lighting plan, which will use existing venue facilities, lighting equipment is often installed on pre-assembled structures and moving light positions and cues are pre-programmed to optimise the use of time.

The successful installation of the automated touring sets depends on an absolutely level stage surface to ensure that all the moving parts work properly. To this end, Unusual Rigging's engineering specialists have replaced raked stages with level stages at The Bristol Hippodrome and The Alexandra Theatre in Birmingham to prepare them for incoming shows.

Unusual note that the use of service truss, holding the sound, lighting and automation racks, is increasing, as fixing all of this equipment to a truss structure, which rolls into the venue and is subsequently hoisted into the air, saves much-needed floor space for the production. Such customised solutions are increasingly called for, as many theatres' stage facilities have remained virtually unchanged for decades, while production values and the available technology has made huge advances. Among Unusual's increasing client list in this area are The Lyceum, Sadlers Wells, The London Palladium, the Liverpool Empire Theatre and the Royal Opera House.

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**David Milly, Theatrical Lighting Systems:**

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## Martin Exterior 600 at Leeds Castle



Set on two islands in the heart of the Kent countryside, the romantic castle of Leeds, near Maidstone, provided the perfect setting for the launch of Martin Professional's new architectural colour changer, the Exterior 600.

On Saturday November 7th, Leeds Castle played host to a Grand Fireworks Spectacular, an event recognised as one of the finest of its kind in the country. It was during this event that the new Martin Exterior 600 was unveiled for the first time on English shores. The 'son et luminaire' display was designed as a spectacular global tour, the castle awash in various colours depending on the country theme. Developed from the award-winning Mac 600, the latest in architectural lighting, Martin has taken the record breaking and road-proven Mac 600 colour-mixing washlight, and housed it in a super solid, weatherproof, safety-sealed, convection-cooled unit.

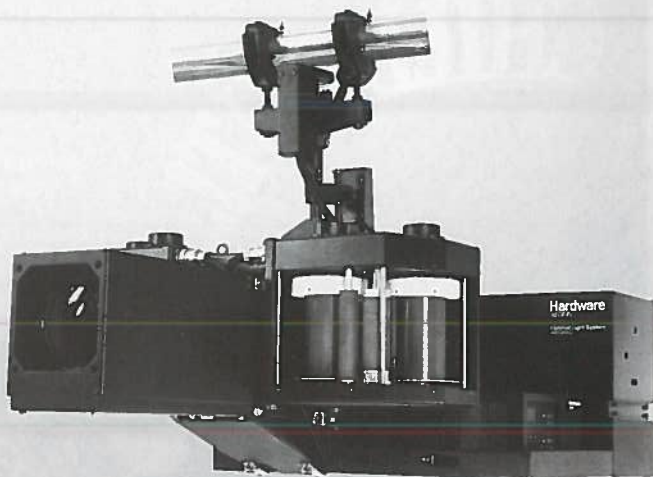
The Exterior 600 offers a wide array of lighting effects. The dimmer instantly snaps or gracefully fades to any light level. Likewise, the CMY colour mixing system also snaps or glides between any of an infinite number of colour combinations. Featuring an independent colour wheel, red, blue and green filters are also available. The unit also features a colour temperature correction filter. The beam may be softened with the frost filter or flattened, widened and rotated with the beam shaping filter. All effects are programmable via most DMX and Martin controllers. To date, the Exterior Mac 600 is the only exterior fixture on the market to be fitted with a variable zoom from 18 degrees to 25 degrees.

## Laser Safety Course

ELA's first Laser Safety Course (LSO) took place in November at Loughborough College. This section constitutes an integral part of the Level 3 BTEC Laser Safety Office Award course and associated topics addressed included the use of laser control systems, the human eye, event planning, risk assessment and safety assurance, the ELA risk assessment documentation, measurement theory and calculations, safety issues and installation procedures. The next part of the course - Level 2 BTEC Entertainment Laser Operator and Entertainment Laser EHO - will run from 25th-29th January, 1999.

For further information on the courses, interested parties can contact ELA's Geoff Jones on (01633) 838280 or Loughborough College on (01509) 210835.

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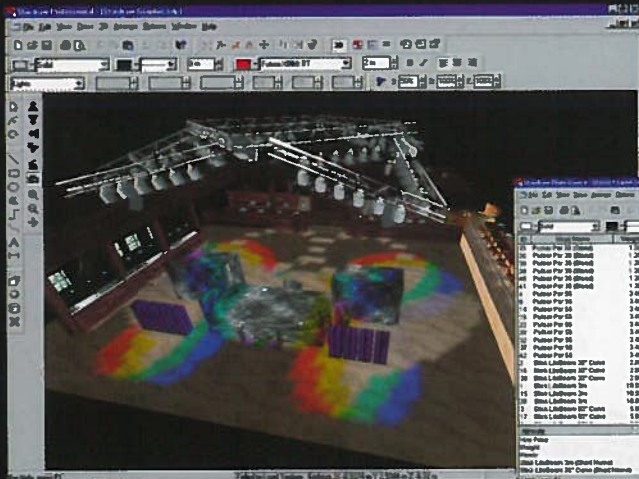
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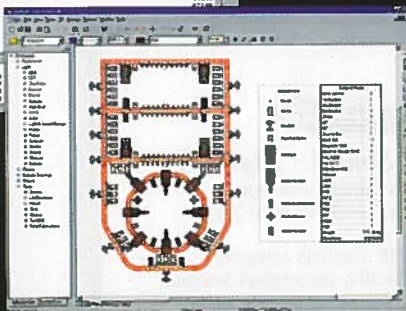
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Keeping an eye on the future

## Behind the Scenes at MTV Awards

Every award show requires an enormous amount of technical planning - maybe none more so than the MTV Europe Music Awards, which this year took place in the Fila Forum in Milan. With nearly 7,000 people watching the ceremony and rock festival live, the 16 awards were presented in front of a TV audience of around one billion across 80 countries. Behind the scenes there was a close sense of teamwork. According to Mick Perry, who has been the technical director of these awards for the last five years: "The challenge of this event was dove-tailing the different elements together for what is ostensibly a television programme in the form of a rock and roll concert.

The staging of the event was complex to say the least and the task of providing the stage and set elements fell to London-based Conference Staging, which won the tender only two months prior to the show. The futuristic set, designed by Cath Pater-Lancucki, was constructed from timber and steel, and covered in lycra, plastic and gauze. Anthony Joseph, managing director of Conference Staging, who masterminded the build on-site, explained what it entailed: "Over 2,000 man hours were spent on this six-week build. All the components of the stage were built in our London warehouse using over 20 tonnes of steel and timber. The engineering design for the stage incorporated elliptical staircases, walkways, two sweeping curved ramps and two towers (elements of which are shown above), which allowed performances and presentations on a number of levels. We shipped the whole lot out to Milan

where the stage fitted together like a vast three-dimensional jigsaw."

LSD were called in for both the main event lighting (as in the previous four years) and also as suppliers for the after-show party. The lighting designer for the event was TV event supremo Alex Gurdon and his design embraced every item in the LSD lighting compendium and a few that are not: 64 Icons, 40 Cyberlights, 22 Nat 2.5kW, 104 Studio Colors, four Razorheads (used indoors to focus onto the 48" and 39" mirror balls), and then there was the heavy artillery: 18 Megapods, 42 MoleMags, 33 Fridges (that's three Terra Strobes with a MoleMag colour changer) 80 Birdies, and 16 HMI 2.5kW, 15 HMI 5kW and three HMI 10kW x 3. All of LSD's circular trusses were in use and Gurdon also included six Pani BP4 projectors from Production Arts, which is, of course, one of LSD's new partners in the Production Resource Group (nice to see that potential synergy working already).

Britannia Row supplied the main audio system for the awards, as well as 14 other smaller systems for events such as the party, hospitality and entrance area. The main system consisted of 48 stacks of Turbosound Flashlight, with four Yamaha PM4000s front-of-house for the live artists, and a Langley Recall desk for VT and playback. On stage, five Midas XL3s looked after the monitoring, with a dedicated 24-channel XL3 for



the radio mics. The other smaller systems consisted mainly of Flash/Floodlight combinations and JBL.

Eric Porter, managing director of Beamrange, who has been in the rigging business for 20 years, headed up the rigging team: "There was a vast amount of trussing, rigging and staging, all in very close proximity. The 400 metres of trussing held up 248 lights. Using a detailed analysis to show the relationships between the lighting, staging and other peripherals, the rigging went up in less than a week using 140 chain hoists. It covered most of the arena and the end result was superb."

Feeding people is never the easiest job, but providing over 2,000 meals on show day was a mammoth task. Eat Your Heart Out were the catering company in the hot seat, who sent a team of 37 (led by head chef Vicky Beever) to Milan. And if you think you've got it bad at Christmas, the team prepared over 3,500 meals in 10 days.

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LENNY KRAVITZ Photo by Steve Jennings



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## Cool, Calm, Collected: Selecon's Pacific Range

Selecon's latest product release, the Pacific Cool Light range, is the result of the largest product development programme ever undertaken by New Zealand-based manufacturer, Selecon. L+SI takes a closer look at the R&D process.



First seen at PLASA in September, the Pacific takes a different approach to the

problem of heat management in tungsten halogen luminaires. It features an Active Heat Management (AHM) system specifically designed for the Pacific which means that the lens tubes can be made from plastic.

The Pacific boasts both zoom and fixed-beam systems from the one luminaire, and a choice of light sources that encompass the needs of both entertainment and architectural lighting. Other features include automatic disconnection to the power supply when re-lamping, 360° rotatable lens tube, interchangeable colour coded lens assemblies, two pattern mounting slots and a unique planetary gear peak/flat adjustment.

But aside from its considerable functionality, what really makes this fixture stand out is its coolness. What the design team have done is to place the lamp base down beneath a 45° 'cold' dichroic mirror. The mirror absorbs up to 80% of the heat generated by the lamp, while reflecting the cool white light beam down the lens tube. Behind the mirror sits a chunky aluminium heatsink. It's one of those innovative designs which is, in essence, very simple.

Of course, behind the apparent simplicity of the idea lies a very lengthy technical battle to bring the completed product to life. The two-year process was led by Selecon's director of product development, Andrew Nichols who set about the task of finding a satisfactory 240v lamp. A step towards that goal came when Philips released their Blue Pinch range (see L+SI Jan 96), but it was not until Philips released their compact GKV 600W grid filament biplane lamp last year, that the second part of the light source solution fell into

place. The design would collect the light in the most efficient manner with the lamp positioned axially in the reflector, but base down, in the coolest part of the luminaire, away from the heat; it would reflect the light down the lens tube via a 'cold' mirror at 45° above the reflector, taking much of the heat out of the light

beam. Working concurrently with the design and sourcing of the cold mirror technology, the team also began to concentrate on the optical system of the luminaire. In common with most other manufacturers, Selecon had previously used plano-convex lenses for their zoom profiles.

"Our goal was to provide 'near condenser' beam quality while maximising the output," explained Nichols. In order to keep the size of the finished unit to a minimum, it was decided to use short focal length lenses, but two sizes of gate: one optimised for the wide zoom and 20°, 30°, 40° and 50° fixed beam units ('A' size pattern) and the other with a smaller gate ('M' size pattern). This reflector collects the light into the smaller gate, a 100mm diameter rear aspheric lens shapes the beam onto the front 150mm bi-convex lens to provide a very useful beam range of 12°-28° degrees, all within a luminaire less than 650mm long!"

Having achieved the removal of the heat from the lamp house, without allowing it to be transferred to other parts of the luminaire body, Selecon had given themselves the opportunity of using plastics in the construction of the Pacific. They chose the highest temperature spec'd material, a very tough new plastic called amodel, used in a number of architectural luminaires and for components for the auto and oil industry. The investment has paid off: theatres in Britain, Netherlands, Sweden, Australia, Singapore and New Zealand are already using the Pacific tungsten halogen units, while MSR Pacifics have been specified as part of Sydney's city lightscape planned for the new Millennium and the 2000 Olympics.

## In the Music Business?

If you're in the music business, then a new service offered by Sound Management may be of interest. The company, based in Leeds, have designed an information database specifically for the music and entertainment industries which will enable users to identify a vast array of companies which could range from a record label in Chicago, a CD manufacturer in New York to a concert tour promoter in Sydney or even a straightforward music management company in London. The database lists the companies under a range of categories and also allows the user to surf the search engine which offers direct links to other services available on the internet.

For further details or to register your company on the database telephone +44 (1977) 680030.

## MAD in the US

UK company Mad Lighting Ltd will now supply their full range of lighting effects throughout the USA under the MAD name for the first time.

The new company, MAD Lighting LLC, was officially launched at the recent LDI show in Phoenix. Operations manager Michael Klugar and his sales team will look after the new stateside organisation from the company's office and warehouse facilities in Charlotte, North Carolina.

MAD Lighting LLC can be contacted at P.O. Box 560846, Charlotte, NC 28256-0849, USA. Tel: +1 (704) 372 0153. Fax: +1 (704) 372 6121.

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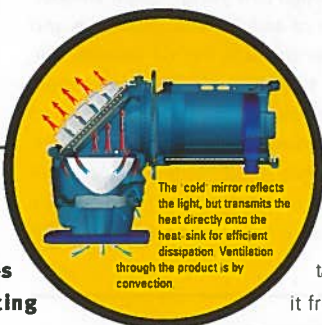
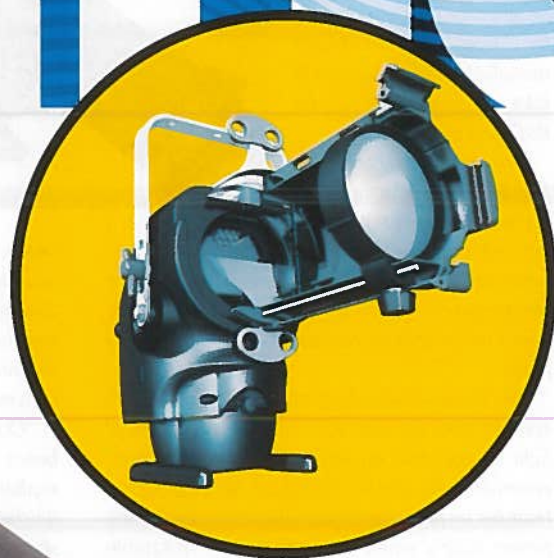
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The cold mirror reflects the light, but transmits the heat directly onto the heat sink for efficient dissipation. Ventilation through the product is by convection.

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*"The design of the luminaire shall be such that it is not*

*possible to insert a lamp into a "live" lampholder of the luminaire. This requirement does not apply to luminaires intended for professional use."* Clause 17.6.1 of the European standard EN 60 598-1 applying to theatre luminaires.

**The PACIFIC range is fully compliant with CE requirements.**

**To trial the PACIFIC or for your copy of the PACIFIC CD and brochure contact your Selecon dealer**

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# CIRQUE DU L'EAU

Rob Halliday heads off to the Bellagio Hotel in Las Vegas to discover how the innovative Canadian circus troupe have reinvented the water show

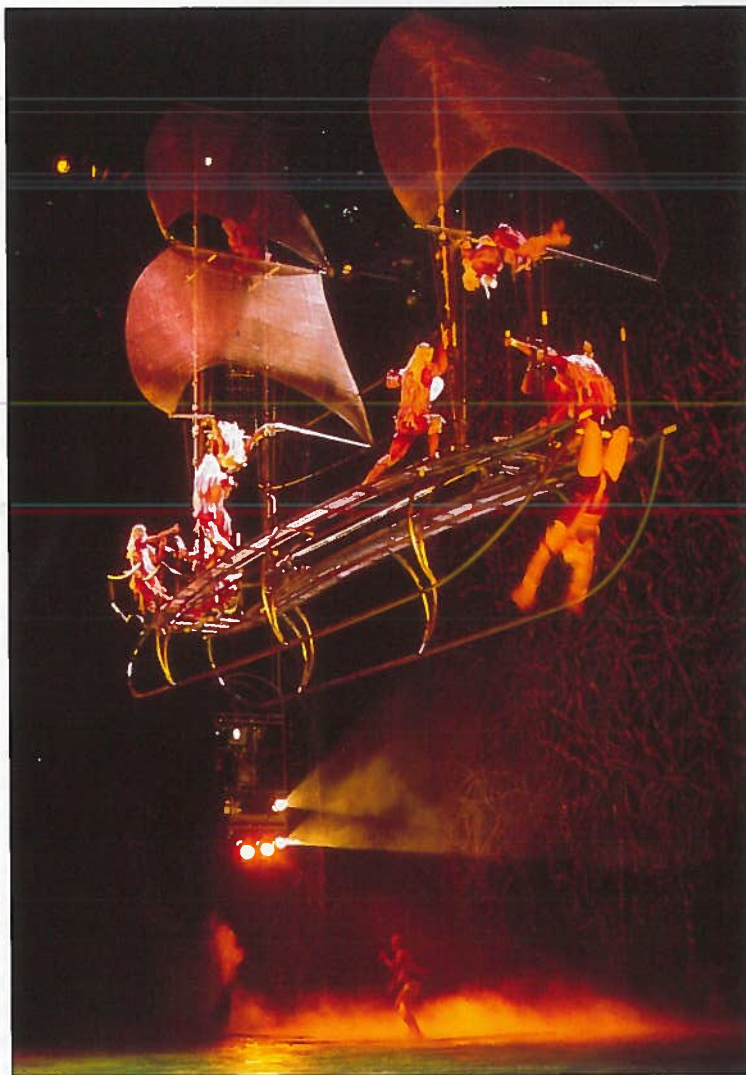
If you're a performing troupe that has taken an innovative approach to an old performance style and, in doing so, swept to success all over the world, the main question must be: what do you do next? And if you're a company whose shows have amazed and stunned their audiences through their spectacular use of space and flight, the question must be: how do you top it the next time?

The company in the difficult, but enviable, position of having to deal with these questions is Cirque du Soleil, the French-Canadian troupe who have reinvented circus performance in a more theatrical-style, free from animals with spectacular acts linked together to form some sort of coherent evening, all set in stunning venues, sets and costumes with sound and lighting of the highest order. Cirque are now 14 years old; from their early days as a collection of street performers they now employ 1350 people in Montreal, Amsterdam, Las Vegas, Tokyo and Singapore. Their press pack lists yet more incredible statistics, noting that on a typical weekend during 1998, 50,000 people will see a Cirque show somewhere in the world.

The company have already altered and expanded their style and scale of performance over the years: their 'classic' productions still appear in big tops, but in 1993 the company were lured to Las Vegas to create a permanent show for the then-new Treasure Island hotel. The company designed their own theatre in the hotel, expanding on the style of the big-top and adding the kind of technology that would never be possible in a tent. The result was *Mystère*, which was covered in the January 1996 issue of *L+S* and which has had a dramatic effect on the Las Vegas entertainment scene ever since: any number of hotels are now desperately advertising that they have 'spectacular, circus-style productions'.

Five years on, and Cirque have managed to out-do themselves by taking probably the only approach they could and adding the final element to the fire and air which have featured in their previous production: water. The show is *O*, a play on the French word eau, which opened at the new Bellagio Hotel on October 19th. With it, Cirque have attempted to reinvent the water show as they re-invented the circus all those years ago.

As with *Mystère*, the company have created a new home specifically for their new



production, an auditorium now known as the Bellagio Theatre. Designed by Cirque's set designer Michel Crête with Michel Aubé and theatre consultants Sceno Plus of Montreal, this is quite unlike any of Cirque's previous performance spaces. Traditionally they have had their audiences largely surrounding the stage, whether in the tent, the *Mystère* theatre or in temporary performance spaces such as the Albert Hall, now their regular London home. Here they have what is essentially a proscenium arch, albeit a very wide and open one, facing an 1800-seat auditorium that is a beautiful homage to a grand 14th Century European opera house with the seating split between stalls and circle levels and with traditional boxes on the side walls, though these actually house musicians and singers rather than audience members. One of the most stunning features is the domed roof: viewed close up, this is nothing more complex than high-tech chicken wire, but once lit by the M16 battens that surround it under the control of lighting designer Luc Lafortune it becomes a spectacular luminescent entity that is beautiful to behold.

The grand opera style was clearly intended to make the theatre feel like an integral part of the Bellagio, with the hotel aiming to re-create the grand culture of Europe and coming complete with an exotic collection of fine art: "Because you can't sleep at the Louvre," as the publicity has it. The hotel's other design theme is water: the building is fronted by an enormous lake that has a spectacular dancing fountain show every hour. It was this theme that led to *O*'s main feature and this, in turn, led to the pro-arch design of the theatre.

The reason is that the stage contains a 150' by 100' by 25' deep swimming pool that contains 1.5 million gallons of water. Based on this, Crête and writer/director Franco Dragone have created a magical watery world, a tropical island upon which a young boy is washed up to discover that it contains a hidden history of theatre. If it wasn't being used by Cirque, it would make a fascinating set for a production of *The Tempest*.

However, the Cirque team also realised that a water tank wouldn't be able to sustain a 90-minute show. The pool therefore contains seven hydraulically-operated scissor lifts, four downstage that can rise and fall by 17 feet and three upstage with four feet of vertical travel, at speeds ranging between one and 20 feet per second. Each 4' x 8' section of floor contains around 5,000 holes that allow the water to pass through the lifts as they rise and fall, and all of the lifts have safety edges to prevent anyone from becoming trapped beneath them. The variations possible with this combination are endless and spectacular, with people rising from below the water, appearing to walk on water, floating effortlessly across it on giant icebergs, umbrellas or horses or, on one occasion, spectacularly sinking while playing a full-scale grand piano.

More conventional staging surrounds the pool, with an upstage area containing a 'vegetation cloth' created from Lexan using a 45' x 60' mold that swings into place on two vertically mounted curved trusses. There is also a cyclorama cloth upstage that is used both as a backing and for shadowplay; at one point this allows a cute visual pun on Cirque's animal-free status, with projected silhouettes of buffalo and elephants. Curved solid staging also extends around the front of the pool.



Mark Dennis and monitor mixer Pascal van Strydonck at the FOH mixing position.

Overhead, there is a spectacular contrast to the natural feel of water and vegetation in a giant metallic creation called the 'telepherique' - essentially a giant gantry crane which can track up and down stage at three feet per second, and containing an enormous revolve which can rotate at up to 2rpm and has four 1000 pound winches; the revolve also has a hole in the middle through which performers and props disappear. This device serves many functions during the show, the most spectacular being the slow appearance of four carousel horses which track lazily downstage while lowering to land gently on the water, where they become boats and sail off under their own power courtesy of propellers under their tails.

Above all of this is the theatre's grid, containing a fully automated counterweight-assist flying system installed for the show, plus some manual sets "added when we ran out of motors," according to the technical team, who describe how "the company arrived with a basic plan, they knew that they were going to do certain acts, but they didn't know how they were going to get from one act to another or what the order of the acts would be, so basically we had to be ready for anything!" Since Cirque performers are often found in the grid prior to high-level entrances, all of the rigging and cabling had to be rigged overhead leaving the grid floor clear. Rigging for the show was overseen by Joe McGeough and covers all levels of technology: the show uses two automation operators, one to run the telepherique and one for the other automated elements, including the 'BFR', the "Big effing (or something like that!) Roller" that contributes to the show's spectacular opening. In traditional pros-arch style, the show opens with a front-cloth hiding the magical world beyond from view. But instead of flying out this is lifted from the bottom and appears to be sucked out at an incredible rate, seeming to suck air into the stage. Lines from the bottom of the cloth run through the telepherique to the BFR, which looks like an enormous bobbin which runs at 14 feet per second on cue, pulling the whole curtain up and wrapping it around itself.

At the other end of the technological scale is the giant anchor - simply dropped into the pool from the grid at one point. Between these two extremes are the 'comets', red flashes of

material that shoot across the stage. Thread from these runs across the stage to the stage-right fly floor, where it is attached to sandbags that are held up by solenoids. On cue these release, the sandbag falls and the material shoots across the stage. A favouring of 'lower tech' is also indicated by the running crew of 64 (including a wardrobe department who have to deal with a show where "practically everything gets wet!" Costume designer Dominique Lemieux still manages to inject the usual Cirque style into swimwear!) supporting 72 performers.

Of course, the biggest challenge to all of those involved with the show was the pool. Quite apart from the usual swimming-pool style considerations of temperature (a constant 86 degrees) and cleanliness (the water is completely filtered every six hours), Cirque and Sceno Plus also had to deal with the extremes of temperature and humidity that the water created, while keeping the performers warm and the audience cool. The air-conditioning system stratifies the air, providing two 'micro-climates' in an attempt to achieve this, though the conditions are still keeping the sound and lighting teams on a fairly steep learning curve. They also solved the problem of the noise of waves hitting the edge of the pool, creating a gutter filled with different sized pebbles which dissipate the waves. And, of course, of setting and clearing performers while ensuring safety all round: the pool is equipped with air feeds to allow performers to remain submerged before or after their appearances (or even, in some cases, during them), and the water is constantly policed by divers during the show.

The show's designers also had to learn about the new environment: as head of sound Mark Dennis points out, no-one else had ever done anything like this before and there were therefore no books they could turn to for advice. Fortunately, the show has been gestating for a long time, and all of those involved have been using that time to experiment and learn about the new environment. Lighting director Jeanette Farmer, who has transferred to the new show from *Mystère*, recalls the mock-up tank that she and Cirque's lighting designer Luc Lafortune had to play with. There they experimented with the refractive index of water, which leads to the possibility of total internal reflection of light - a

new consideration when choosing lighting angles. They also made all kinds of useful discoveries, particularly the way that water absorbs red light. "Luc doesn't normally use a lot of red," Farmer notes, "but there is quite a lot in this show because of the way it seems to disappear when it hits the water." They also quickly realised that one of their biggest problems would actually be the water being too transparent, with the audience able to see the performers and safety divers moving beneath the surface. This led to the creation of an aquatic masking system, perforated tubes which force air into the bottom of the pool creating 'bubble curtains' that, for the most part, keep things nicely hidden from view while also allowing the water's surface to be varied from glassy-smooth to stormily turbulent.

To house the majority of the underwater lighting, Lafortune and Farmer opted to create 'the fishbowl', a circular corridor beneath the pool walled with 11 x 4" plexiglass windows that contains the majority of the underwater lighting rig, including 2.5k and 4k HMIs fitted with colour scrollers. But some units were still required in the pool itself, and this need for absolute safety led Bob Barbagallo of Sceno Plus on a long search for the perfect earth-trip (or ground fault, in American parlance) system that would provide reliable protection, free from the nuisance tripping that often plagues such systems. In conjunction with Production Arts and Strand Lighting, the solution was eventually found by creating custom cables with the live and neutral cables enclosed in a shield separating them from the earth wire. 288 dimmers out of a total of 1800 CD80s provide ground-fault protected power to the pool.

Strand were also selected to provide the backbone of the lighting control system, which was installed by Production Arts. A 550 console runs the conventional lighting under Jeanette Farmer's control, with a second console providing full back-up - though Farmer prefers to keep the two desks running separately and change the Ethernet data feed over manually if required, rather than relying on Strand's active tracking networking system. Further along the spacious control room which, with its huge windows overlooking the stage from the rear of the circle, resembles the control room of a science-fiction space cruiser, a Strand 520 runs the water effects in the pool through a collection of Gray interface cards and relays. The desk was an unusual choice for this application, but seems to have fulfilled its function well.

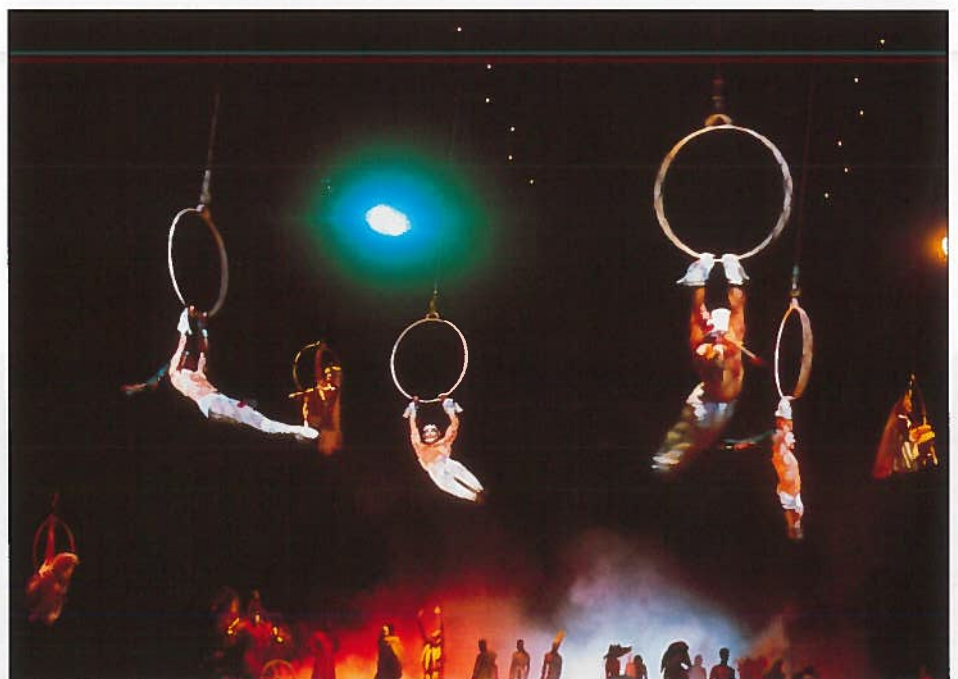
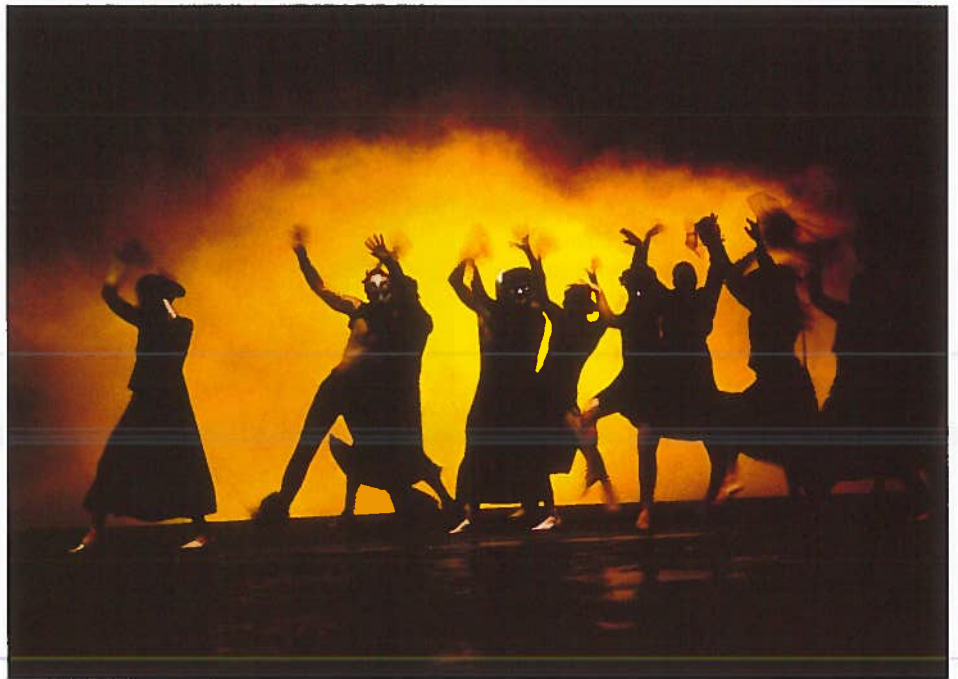
Farmer was clear in her choice of the 500-series, describing the possibility of returning to separate scroller and channel numbers on a show of this scale as "unthinkable". However she also feels that the desk is still really a "theatre lighting console, rather than a moving light desk," and the show's automated rig - a mixture of moving mirror scanners and StudioColors - is controlled from a Whole Hog 2, with a second Hog as back-up: Cirque know that disappointing a Vegas audience who've paid \$100 dollars per ticket would be unthinkable, and everything therefore has a back-up. You'd be hard pressed to tell that moving lights were present unless you were looking for them, since Lafortune rarely moves

them in any kind of 'obvious' way. But his design is as eclectic and effective as ever; the conventional rig is a mixture of ETC Source Fours with scrollers (500-ish lamps with 230 scrollers), Par cans, transparent Unipars used as a decorative feature of the rig and Robert Juliat profiles providing big, clean shots of light; the show also uses eight Robert Juliat followspots with all of the Juliat equipment provided by Production Arts.

The equipment provides for truly beautiful lighting; Lafortune is a master of the big picture, of giving distance by lighting haze and smoke while also keeping even the big acrobatic moments tightly focused and picking out the details, such as the beautifully crosslit figures hanging upstage. The overall feel is of exaggerated naturalism, picking up the 'enchanted island' feel of the overall production and amplifying it. But Lafortune is also not afraid of letting darkness do the work for him: some scenes are lit purely from light through the backcloth, with the rest of the stage in complete darkness save from the image reflected on the water. Any 'tricks' are a result of the lighting team's experiments: the red toplight that lights a performer in the water then vanishes, for example. The red may not feel completely appropriate for the moment in the show, but it makes the moment possible and works well. O's lighting is beautiful, and is a clear reflection of the open-minded inquisitiveness and inventiveness of Lafortune, and of the patience and support of his team: "Luc would just come in and say he'd decided to re-rig the first electrics bar," Jeanette Farmer recalls, "and I'd have to persuade my team that this was a normal and worthwhile part of the process! In the end they saw what I meant!"

Sound designers Jonathan Deans and François Bergeron also had a steep learning curve. The core of their rig is familiar, based around a 64-input Cadac F-type console mounted in a glorious operating position right in the middle of the stalls. The Cadac receives signals from the band and singers, located in glassed-in boxes on either side of the auditorium. This is something of a departure for Cirque, where the musicians and singers have traditionally been in the same space as the performers. According to the head of sound, Mark Dennis, that was also the intention here, but eventually humidity presented too much of a problem to the instruments - which include cello, guitar, triquet, African koras, an assortment of reed instruments, bagpipes, an accordion, saxophones and a flute - and the band were sealed in.

The direct output of each Cadac input feeds a Level Control System LD-88, creating an 80 x 80 matrix which allows the apparent location of sound to be moved around the auditorium - sometimes used subtly, sometimes used dramatically depending on the requirements of a particular piece and the dynamics of Benoit Jutras' music. Sound is fed out through eight Aphex Expressors, 10 x 6222 expander/gates to Crest Audio amplifiers monitored and controlled with a NexSys network and on to a discretely concealed system of Renkus-Heinz loudspeakers split into left and right, upper and lower clusters of Trap 42s and C2 sub-base units. The circle receives sound from a delay



ring of Trap 40s, with a further two of these units providing centre downfill. Custom speakers based on the SR-81 were created by Renkus Heinz for front-fill duty. Effects are sourced from Akai DR8 and S2000 samplers as well as DAT, cassette and CD players and fed through an effects/surround system of Trap 40 and SBS15-2 sub-base units.

While Dennis handles this main mix, monitor mixer Pascal Van Strydonck runs a Crest LMX console providing separate mixes to the 10 musicians, each of whom has their own Yamaha Pro-Mix to give them a degree of control over what they hear.

In addition, the sound team were responsible for a comms and communication system that includes 29 cameras providing 24 views (with nine underwater views) to 45 video monitors, a Clearcom system so large that, according to Van Strydonck, it had Clearcom themselves scratching their heads at times, and a custom underwater PA system called the Neptune System which, along with custom underwater speakers designed by Clark Synthesis, allows music and safety announcements to be relayed to performers and support divers who are submerged. Set movements also directly trigger a Roland AR-100 sampler which feeds a unique sound for every lift movement or corresponding to certain emergencies into the underwater system via a Soundcraft Spirit mixer and Crest 1600 amplifiers. Two of the underwater speakers are mobile, allowing divers to position them close to particular performers to overcome the disruption to sound caused by



Head of lighting Jeanette Farmer.

the bubble curtain: the lighting department may love it, but it is unpopular with both the sound and diving teams!

The result, all round, is a stunning technological achievement: a beautiful looking, great sounding show in a style that wouldn't be possible in any other venue in the world - all held within a spectacular auditorium. Curiously, at the moment, the content of the show doesn't quite match its presentation: if the Cirque norm is "performer enters, does something spectacular, something more spectacular, tops that, tops that again then link into next scene", O currently feels like

"performer does something, does something else then bows, long link into a link into scene". That is somewhat churlish: the feats unfolding before your eyes are incredible whether helped by props (the trapeze bars disguised as a flying boat) or effects (the burning clown, more of his newspaper, then chair, then entire body catching fire without him realising all while upstaging the 'real' fire act) but somehow always seem to end slightly earlier than you'd expect, while the links, though beautiful to behold, seem to go on longer than you'd expect.

"Its all been brought together, now it needs to be allowed to simmer," seems to be the general summary from those who've been through the Cirque creative process before; they recall that it took a year for *Mystère* to warm into the work of theatrical perfection that it became. The Las Vegas show environment, for all of its faults and oddities, is actually ideal for nurturing a show in this way and, with O having an anticipated 10-year run, it will be nurtured and will mature as all live performances should.

Meanwhile, in the increasingly-busy world of Cirque, the creative team have moved on, to a new show for Disney in Orlando, then to a permanent residency for *Alegria* (as performed at the Albert Hall this year and last) and on to still more projects. It will be hard for any to top the technical brilliance of the water, or the elegant magic of that first drape cue. But top them they no doubt will - if only because that seems to be the Cirque tradition!

Performance photos: Joan Marcus

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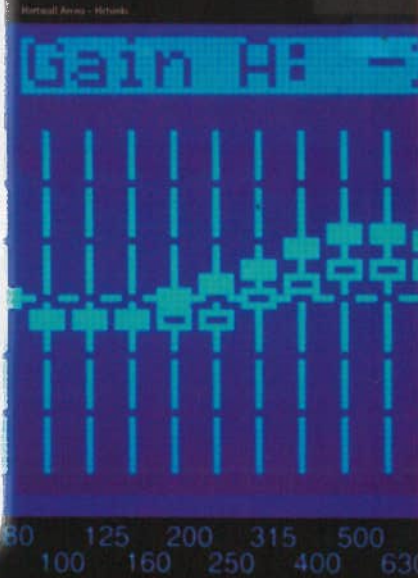
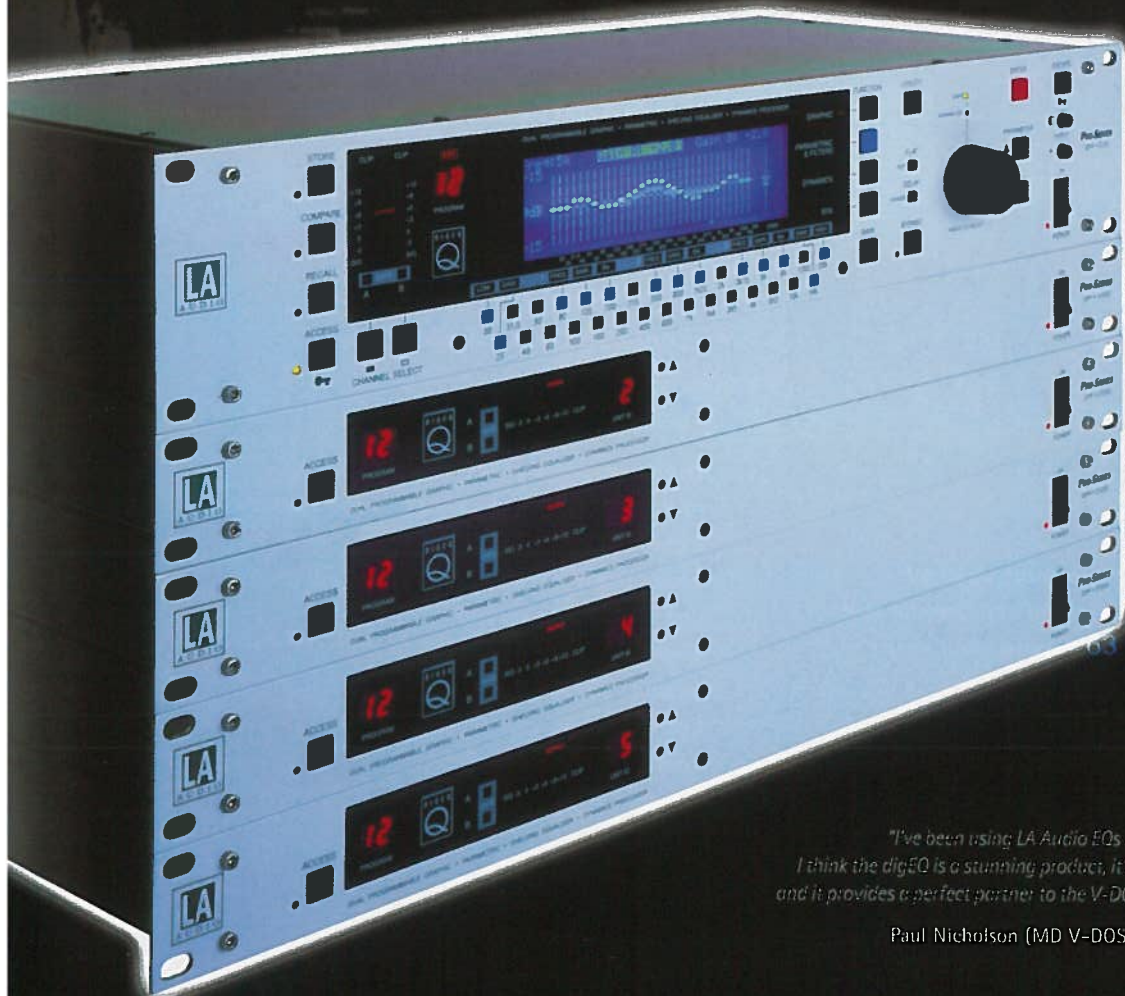
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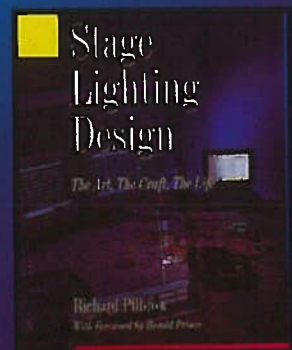
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Widely regarded as the dean of lighting designers for both the West End and Broadway, Richard Pilbrow also heads Theatre Projects Consultants. His second book "Stage Lighting Design - The Art, The Craft, The Life" was named LDI Product of the Year.



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Lighting Musical Theatre

# PARTY ANIMAL

*The Cartoon Network hosted a massive bash in Bedford Square -  
Steve Moles donned his best party gear*

"Absolutely fab," said Mick 'Jaggy' Scullion of Spot Co. "Unique in the entertainment biz," said John Tinnline of Encore. These descriptions may be stretching it a little, but when you get into the realms of cartoon world, anything can happen.

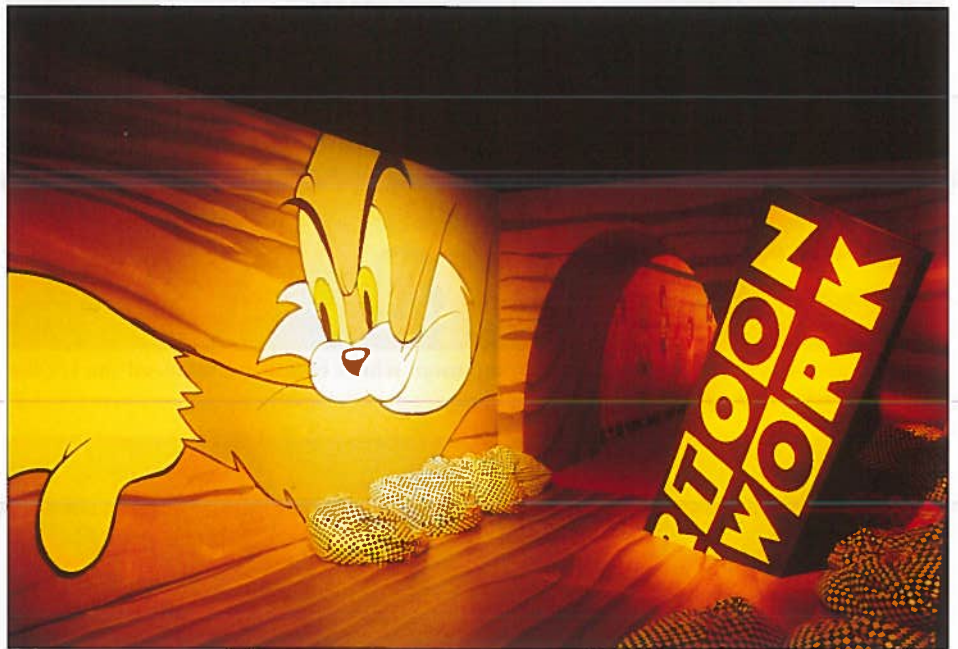
The occasion, in case you're wondering, was the Christmas bash for the Cartoon Network. No small thing, this was to be a big pat on the back for all concerned. So it was on a cool wintry evening in late November that a large De Boer marquee appeared in London's Bedford Square . . .

"It wasn't as big as we wanted," said Scullion. "Originally, it was to be four inter-connected tents, one for each room." That's not to say the Cartoon Network party was in any way small. "Oh no," continued Scullion. "Actually because it got smaller it became more intense."

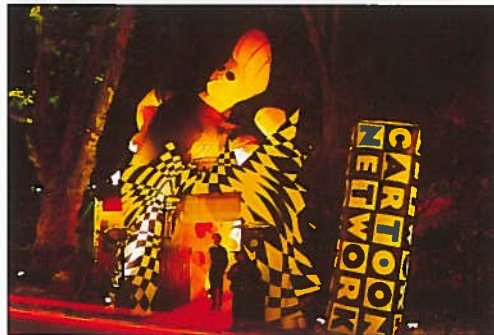
The site was simple enough; producers Riki Tiks chose a downtown location that gave accessibility and a certain élan. The square was totally transformed by the event; although the marquee was the central feature, its surroundings were embellished to provide the necessary atmosphere. Scullion again: "We put lights all around the bases of the trees, plus there was the Scooby Doo minibus parked out there. What was great was the entrance-way - a 40m long corridor that led to the tent." John Tinnline singled this out as well. "We put four pairs of d&b Max cabinets, equally spaced down the corridor. Each pair played back a separate mix - those familiar sound tracks from classic cartoons."

"The effect was similar to when you go to a theme park," explained Scullion: "As you walk in, your ears are presented with sounds that signal you're entering something new, something really different." There speaks a father of two who's not afraid to cherry-pick concepts from the masters.

Whatever the significance of using simple effects to 'transport people to another world' there was no doubting the effect. Maybe the guests all became affected by the scenes inside, it was after all, just kid's stuff in there. And yet whether coming in or going out, guest comments all centred around how great the overall effect was. "That's what I meant by unique," said Tinnline. "We probably do a couple of these type of events for Riki Tiks each month - some huge, some quite small. The thing is strategy: there's a team. Donna Worling from Riki's produces, Bruce French (also Riki's) does the design, and in terms of suppliers it's always the same people. We handle the sound, Ali Deck supply the staging, De Boers the tent, Spot Co the lights, and Acre Jean provide drapes and dress the interior. The difference it makes is in the set-up and running. On the little things for example, you're not worried about lending someone a cable or something, because you know you'll see them again. On



The Tom & Jerry room (above) and the main entrance to the party (below).



the day, that sort of thing saves masses of time and money, avoiding little last-minute van runs haring around all over the place. More important are the benefits of co-ordinating our efforts - because we all work together we can avoid many of the things that are costly and time-consuming. That means Riki Tiks end up with a better job for their budget." Of course, the important thing there is trust, but as Tinnline reported that they've been doing these events together for over two years now, it seems that no-one has got greedy and spoiled a good thing.

The party itself was a hoot: you can see from the accompanying photos that French's concepts for the interiors were very strong. Pastiche definitely, but that's just the sort of environment that breaks convention and allows people to be relaxed and uninhibited, and it encourages them to do it a fun way (no drunken yahoo's here). The entrance corridor led directly into the main lobby, an out-of-scale room themed around Tom & Jerry, furnished with a huge Sardine can (Jerry's bed) and naturally a giant mouse-hole in the skirting. Here Scullion (who LD'd the job, as well as managing it) put in two dozen Pars and a

bunch of 1kW fresnels. "Lots of clusters of lights with dark, saturated oranges and reds. That's a lot of light in what's a relatively small space, but because of the dark hues I used it doesn't appear bright, but it does enhance that strong painted cartoon colour feel."

Tom & Jerry was only the appetiser - other rooms included the Casablanca Bar, the Cabaret/Karaoke room, a Scooby-Doo diner, and the Johnny Bravo Disco! If you're unfamiliar with Johnny Bravo, he's a cartoon character - of course - a sort of crass seventies throwback caricature: blonde hair, sharp physique, vain in the extreme, totally inept with women and delivering the most appalling male chauvinist overtures to them. It's a winning psychological profile that means six year old girls love him. Apparently?

Anyway, true to type, the disco room had a glass dance floor (one metre high), with lights below, à la *Saturday Night Fever*. Above it was a box truss filled with Fuzz lights, Martin Mini-stars, Trackspots to jazz the dancers, and fresnels dotted about to wash the cartoon images on the walls. Encore put in four stacks of d&b 402 for the disco. "Putting one stack on top of another each side of stage means the PA occupies a tiny footprint," added Tinnline. "It's the perfect system for a disco, such a tight sound, and even in a small room like this, the relatively narrow dispersion is not an issue." But dealing with disco required more than just a good PA. "We provide everything for the DJ - concrete paving slabs and foam for the record decks to sit on, a selection of Pioneer and Technics CD players, and a Rane HP24 DJ mixer. But what's important is having the right person to look after the DJ and the system. They have to be sympathetic to what the DJ is



Pictured above is the Haunted House dining room whilst below are featured the UV bar (left) and Ricky's bar (right).



doing and yet be able to keep them under control, and that's hard. It requires a special diplomacy. A DJ is an artist in the same way as any band. They're up there on stage and they have as much right to make the noise they want as any guitarist." Micky Boyle, the evening's happy diplomat on this occasion, had one very pertinent comment to make: "On long dance shows like this, when the PA's running for eight hours or more, there are times when nature's call must be obeyed. It's nice to know you're using a system you can walk away



from and not have to worry, because you know it will still sound the same when you return, no matter what."

The other rooms were all themed, and no less wacky. The star of the cabaret room was the Chinese Elvis - I'll leave him to your imagination. Performing in a room dressed out in plush red velvets ('the brothel look' as Mr Scullion described it - we'll have to take his word on that one) Elvis and the many valiant karaoke victims had a tiny stage to stand on, just 10ft by 8ft, and were lit by Scullion in a

stark, retro, beamy look. Just a few floor Par up-lights with a minimal 2kW wash from above were all that he used for that added seedy look.

The Casablanca bar was my favourite: Dooley Wilson look-alike piano player, old-fashioned posters on the wall and a Bogie mimic complete with Tux. And just the perfect ambience of subtle lighting with plenty of dark shadowy corners. You could almost smell the kerosene lamps - all it needed was for people to talk with a scratchy soundtrack voice. Encore did go some way to gaining that dated sound; the piano was mic'd with just a Shure 57 and 58 run through another four d&b Max cabinets, producing that slightly raw open piano sound.

The Scooby-Doo room was both haunted house and buffet. A long white banqueting table was lit from above by a single golden chandelier, the walls all washed in UV and sprayed-on cobwebs, with cobwebs again on the floor thanks to a couple of Clay Paky HPEs fitted with web gobos. Hidden above the table in the shadows were soft floods gelled in gold, dimmed up just to give a little help to the diners when the food was served. The room also had its own bar, again following the Scooby theme, the barmen dressed in lab coats (like the tall ginger-haired character in the 'toon) and the bar was festooned with nice detail touches like Bunsen burners and test tubes to enhance the mad lab' theme. The diners were also treated to open views of the square, the tree lights, and Scooby bus, thanks to a rather striking glass wall fitted to the marquee.

Some 600 people came to this party (invite only) but Tinnline recalls having done one for 10,000 earlier this year. Either size, they're by no means small events, and the care put into the production, while perhaps not as lavish as say a Janet Jackson stage show, easily maintains the same conventions and standards. Whatever you're feelings about cartoons, you have to admit it sounds a lot more fun than standing in the kitchen with a Party Seven listening to a spotty accountant from Surrey tell of his sad, sorry bonking exploits.

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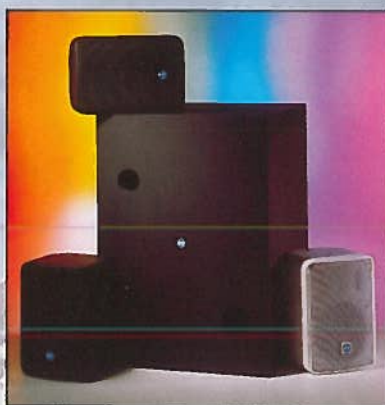
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# RACING LINES

*A newly-opened bar with a motor racing theme has opted for a sound system that is low in profile, but high in power. Lee Baldock reports*

A stylish new theme bar has recently materialised, just a little way outside Chatham in Kent. Themed around what seems to be the main preoccupation of its owner, Terry Moore, the bar - called F1 - is a stainless steel-clad shrine to motor racing. Moore is himself a keen racing driver, and certainly looks the part with his compact, wiry frame. For F1, he has used his considerable contacts within the motor racing fraternity to conjure up a wealth of artefacts and memorabilia from the sport. With its chequered flag floor design, coffee tables improvised from hefty Formula 1 wheels, wall-mounted nose and wing sections from Formula 1 cars, the occasional well-muscled engine block and blown-up murals of familiar cars and stars covering the walls, the venue is a mirror to the sport it is named after. And they're just the nick-nacks: on the left hand side as you enter the bar sits Damon Hill's 1997 Arrows car, while a Porsche sits to the right, looking ready to pounce on unsuspecting punters as they walk through the door.

But despite the presence of the racing cars, this is not an enormous venue: a former car showroom (of the more traditional kind), the building is a typical low-ceilinged, glass-walled box at street level, attached to the side of the impressive gymnasium and health club which Moore also owns; but the low, sleek lines of the bar area are perfect for the F1 theme.

At the far end of the bar, where the connecting door to the gym is situated, an Electrosonic 4 x 4 videowall relays continual footage of famous racing action, while three individual monitors carry the same pictures around the main floor area at the entrance end of the bar. To the rear of this is a small raised stage area carrying soft seats and F1-wheel coffee tables, but which can also cater for visiting live bands - something which Moore will be making full use of.



*"... on the left hand side as you enter the bar sits Damon Hill's 1997 Arrows car, while a Porsche sits to the right..."*

When it came to choosing a sound system for the venue, Moore turned to Dave Ong of Panache Audio Systems (based in Strood, Kent) for advice. He needed a system that would provide clean coverage at both background and foreground levels, but which needed to be physically small and unobtrusive at the same time, as the low ceiling level and glass-walled

lines of the room left little room for boxes.

To this end, Ong turned to Andy Austin-Brown of RCF UK to help design and incorporate a system that would fit in with Moore's specifications. Because of the open areas, and the ambient acoustical nature of the venue, Austin-Brown suggested the use of four RCF Monitor 8s. Two were placed above the centre of the main area adjacent to the bar, and another two were then positioned singly to either side, to create constant coverage patterns. Then, beneath each of the single Monitor 8s, they placed an RCF MSW-8 sub-woofer, allowing clear, full-range sound reinforcement.

Along the side of the bar, the restaurant area is decked out with metal tables and chairs, and here Ong and Austin-Brown chose eight RCF PL81 ceiling speakers, for aesthetic reasons, as well as both performance and coverage requirements. Although the PL81s are normally used in high impedance situations, in this case they were specified with their transformers bypassed, and operated in low impedance mode. Further PL81s were then installed singly in each of the toilets,

and the kitchen, using high impedance amplification.

All processing was completed using RCF amplifiers and a single Cloud Electronics CX233 mixer-zoner, with the main bar and floor area as one zone and the restaurant area as the second. Both zones were provided with simple remote level controls to provide easy access to the bar staff.

Rather unusually for such a project, the installation was a fairly leisurely process, as Dave Ong was given plenty of lead time. "I came in and did a little here and there as I could fit it in," he explains. "The only difficult thing was that I really didn't know what the venue was going to look like - nothing of what you see here was in place - it was just a shell. Terry had said that he wanted the bar to be



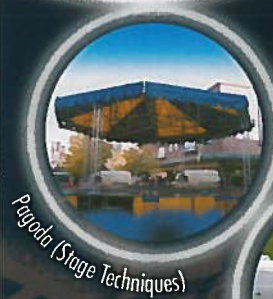
about here, curving out like this, but that was about it." What F1 has ended up with, in keeping with its sleek styling, is a compact, unobtrusive sound system: it may have something to do with everything else that catches the eye, but the loudspeakers really are one of the last things you notice on entering the bar. Yet the system still packs the necessary power and the required clarity for a bar environment of this size.

What F1 hasn't ended up with, on the other

hand, at least not by the time I visited, is a rack for the VCRs and image processors which were running the videowall. These units were, at the time, stacked in a wonky pile above the neatly-racked amplifiers, while two up-turned coffee cups had been borrowed from the bar and inserted between the processors to separate them and stop them overheating. I'm sure the rack was being delivered another day: when a system costs this much, there's bound to be one thrown in gratis.

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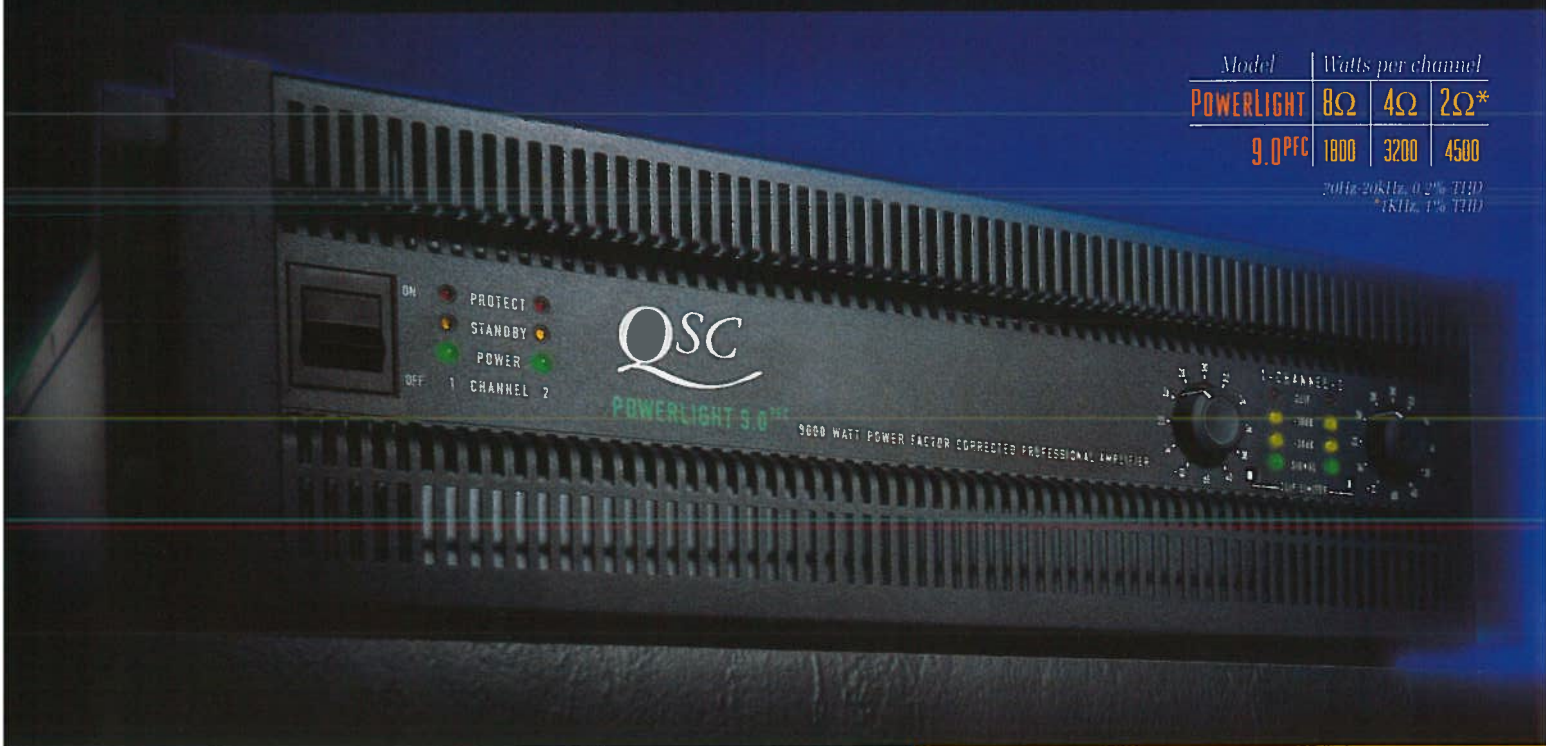
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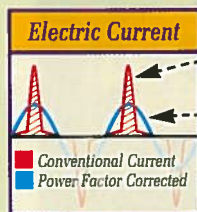
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# LATER . . .

*Steve Moles, Jools Holland and an eclectic mix of music*

For the host of a popular music show you have to admit Jools Holland is a little strange. For one thing, he's a successful musician in his own right, and although Suggs may share that epithet, there the comparison must end.

Holland is well-informed, urbane, and even, if slightly irreverent in his general delivery, makes the job of hosting look easy. This ability to appear relaxed and at ease must surely be one of the contributing factors to the enduring success of 'Later'. After all, it's been running for six years now, this being the twelfth series, and still audience figures continue to rise. Bands queue up to be on Later, and while Chris Evans may explore the domain of 'personality', Holland allows us armchair purists to roam abroad in the realm of our true passion - music. Evans steers us to what's hip with each show built around just one or two visitors, Holland meanwhile, would not be so presumptuous. Each week a relentless procession of artists is paraded before us and we are indulged a healthy two or three song sample of their wares. 'This is what's on offer, make your own mind up' might be Holland's epigram. Jo Whiley may be snapping at his heels in the stakes for adult music credibility, but so long as she's trapped in the half-hour snack format there's little chance for serious competition.

However, all three presenters have their merits, especially for band managers and record companies. Even if they have a good idea of the expected shelf-life of their bands, it must be no easy task deciding which is the right vehicle for them.

On the occasion of L+SI's visit to BBC television centre, Holland's sharp presentation was all the more impressive for what he was doing in his free time. Despite a two-day commitment to each weeks' show, Holland was also in the midst of a UK tour with his band, and simultaneously launching a new TV show 'Beat Route', with all the personal appearances and promotional chores that demands. Yet all was serene and controlled: as I said, he makes it look easy.

The entire focus of Holland's show is the music, and that emphasis was immediately apparent when I entered TC4 at the BBC TV Centre in Wood Lane. Although the familiar battery of lights filled the studio ceiling, many were, of course, just parked there. Mainly conventional, Pallas 4s and the like, there was a small selection of wobbly stuff, Mac 500s, scans and VL5s.



Above, preparations for the show in progress and below, JHE's project manager Robert Harding.



However, unlike a pop vehicle of the Top of the Pops genre, there was a total absence of set. TC4 is large, but in this instance very full featuring five performance areas, plus the floor centre where Holland will oft indulge himself on piano, or invite a more delicate acoustic performance, such as Björk recently did with two classical Spanish guitarists. The walls are encircled by a continuous cyclorama, a black backdrop with abstract wave-like pattern upon it. On the floor, apart from the occasional Steeldeck riser, all is clear. No set pieces, no gaudy glitter paint work, no props, desks, trendy bars, or post modern references to our industrial past. The nearest this show comes to

attempting a statement - other than musical integrity - are the occasional painted banner drops behind the bands, or swags of satin drape here and there. These subtle embellishments are tastefully selected by designer Miranda Jones as part of her wider responsibility for planing the studio floor layout each week.

As with many TV studio visits what most surprises is the clutter. If you've seen the show you'll be familiar with its usual clock-face format. Holland swings from band to band in an arc, a central boom-mounted camera providing the linking shots while the other cameras scuttle around to the next artist. To fill the gaps there's a small invited audience for atmosphere. Yet director Janet Frazer Crook repeatedly manages to provide performance shots that belie the flotsam of live music that is never more than a few centimetres away.

For example, I was amazed to find that instead of a battery of monitor desks hidden behind the cyc' drape, as was the eminently sensible practise for 'The White Room', here each band has its board tucked in immediately behind them. Yet you never see it.

The visit also exposed the ignorance of my assumption as to which company might provide the audio experience for this show. A guess of a die hard rock and roll PA company like Entec, Wigwam or SSE proved seriously adrift. Discreetly (and obviously efficiently, because they've been there for all 12 series) John Henry's (JHE Group) are the contractor of choice, a firm made famous by the rental of



**Men at work:** above left, audio engineer Dave Westrop with the older-style SM16 48-channel board, and right, monitor engineer Adrian Barnard working from a Midas XL3.

back-line equipment. At their invitation I met with Robert Harding, JHE's project manager for live audio.

"You can't miss him," said his boss. "Thinks he's Errol Flynn and looks like Yul Brynner meets Albert Steptoe." Somewhat disingenuous, Harding is at once charming and still remarkably animated about this particular job, despite six years of it. He's also a veteran of the Old Grey Whistle Test, so he knows his stuff, and just how bad things can be. "We provide all the floor sound, a small amount of PA as well as monitor," he said. "Plus, we split the live sound to send to the broadcast engineer. Although there's generally five or six acts each week and we supply as many boards, usually just three or four engineers from us is enough."

In this instance, Mark Napier, Dave Westrop, Rob Turner, Aden Gregory and Adrian Barnard. "We usually dedicate a man to each artist, plus a floater, who will also take care of the centre floor feed."

Timing for the show is critical: although performed live, it is recorded and edited, "but it's rare that we stay late to do a re-take. I'm contacted by Sam (Samantha) Ribbeck, the assistant floor manager on Wednesday." That's the day immediately after the previous show has been recorded. "She collates the mic' and input lists, collecting them from the various record companies, managers and, as many of these bands are on tour at the time, their production managers as well. We check this information against the stage plan, and while that's being done, Mark Cooper, the producer, decides which songs will be performed."

Naturally, that's the smooth outline. As Harding admitted, what actually happens is that they may receive as many as half a dozen different stage plots for one band. "It's the usual thing - some girl at the record company is asked to provide a plot and she digs out something from a file from a show two tours ago."

Errol Flynn he may not be, but Harding is dogged, taking it upon himself to track down the essential information by checking itineraries, calling gigs and speaking to the horse's mouth. "Mike Feltham the broadcast

*"Bands queue up to be on Later, and while Chris Evans may explore the domain of 'personality', Holland allows us armchair purists to roam abroad in the realm of our true passion - music."*

engineer will be doing the same. Whichever of us gets there first faxes the relevant information through to the other. That usually takes me up until Friday, and it's important work. We always strive to give every band exactly what they want. Sometimes that means we have as many as 150 inputs and perhaps 50 to 60 separate mixes on the floor for one show. This show has a reputation for the best floor sound of any TV show - that's one of the reasons why bands like to do it." This was not an assertion Harding was able to qualify, but there were no complaints on the day I was there.

In addition to the main broadcast desk, Mike Feltham has a supplementary board from JHE - which he uses to handle the effects. "Mike [Feltham] is very good," enthused Harding, "an excellent engineer. The stage sends all go through BSS splitters down in the studio, with all channels splitting upstairs to Mike, and to each relevant monitor board. As well as several stage mixes for each band the monitor engineer mixes down a two-channel full-band send which then goes to the audience mixer."

The sound reinforcement for the audience is moderate, but not sissy. JHE again supply the system, four pairs of EAW KF300s hung around the room, with four SB1000 subs on the floor. Although there's not a huge amount of power there, and naturally not much desired, there is the necessity to produce atmosphere for the punters, something JHE went to some lengths to achieve. "The thing is," explained Harding, "if you can't have the level, you'd better get the coverage right. The speakers are hung amongst the lights in the grid, something which makes positioning awkward, and repositioning very tricky. Early on in the programme's history, when things were quite low key and there were

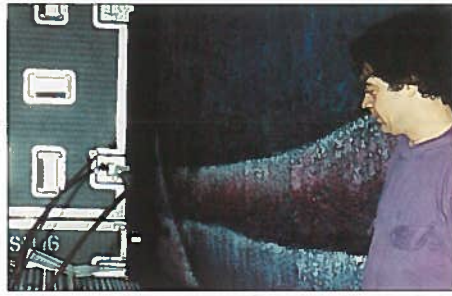
just a couple of bands on each show, we designed a hanging frame for the 300s that allowed us to aim them as accurately as you would a studio light."

It wasn't until the sixth series in, when the show had expanded, that they were made. Using the essential parts of a standard pole-operated TV light yoke, Nigel Jarvis from the BBC built the frames to JHE's spec. "It was essential we had them involved; everything that hangs in

here has to be safety'd and safety'd again," said Harding. It's probably a small thing, and arguably the KF300s are now a bit long in the tooth, but there's no doubting how subtle the importance of live atmosphere is. Without that ambience, what comes across on the screen wouldn't be so potent. The studio live sound is also finessed further, the floor sound engineer using BSS 804s to time align the system into zones relevant to each band's position, so not a secondary consideration at all.

Over the weekend JHE prepare all the monitor systems and then load in on Monday morning, sub-contracting two or three stagehands from Hercules. "Great guys," said Harding. "There's a couple that have been working with us for a few years now. They know all the gear and the format, and that's a great help."

Band gear goes in and up first, and in a natural progression, if necessary, JHE will also fulfil back-line requirements. Then monitors come in and set up around lunchtime, ringing out being staggered across the afternoon. Everything is PAT tested on site, although JHE do conduct their own test in-house each time the gear leaves the warehouse. "That evening we'll rehearse all the bands," continued Harding, "about one hour each. Then Tuesday is taken up with camera rehearsals, although that's time we can valuably use to sharpen up what we do for each band. Recording then takes place Tuesday night, starting about 8.30pm and lasting usually no more than two hours." Not bad going for a one-hour presentation. "We do have the odd re-take, especially if a band is not happy with their performance, but that's rare. We had just one last week. The bands play it live, and that's



Aden Gregory (left) and Mark Napier using a Soundcraft SM12 and SM20 respectively.

how the producers want it. It's not unusual for us to be all packed and loaded out, and up in the after show bar by 1.00am."

And that appears to be a significant consideration for those working on the show. Adrian Barnard was representative of all the monitor engineers in the studio that day. "It's nice to get home at night." There is a price for not clambering onto a tour bus night after night, however. "I'm more than willing to be phoned up three or four times a week for sudden one-offs. I end up doing lots of interesting things with Robert [Harding]."

Barnard is an interesting engineer: he started his career at RADA, then went on to run his own PA company in Amsterdam before returning to the UK: "You just get a greater variety of work here." Barnard operates on this occasion from an XL3, Aden Gregory and Mark Napier stand side-by-side, using a Soundcraft SM12 and SM20 respectively. "Quite often we just baby-sit for the band's own monitor man," they concurred. "The trickiest thing is managing time," said Napier. "With four or five set-ups you can't all be out there yelling one, two at the same time. But we've all got used to TV world now." Both men also voiced appreciation of the Soundcraft boards: "Look at this," said Napier, "32 channels, 20 mixes, and it's tiny." Obviously a significant contributing factor to keeping them out of shot.

Dave Westrop at the opposite end of the room has an older style SM16 48-channel board, but then he had a riser to hide behind.

Looking after the band Faithless on the day, Westrop described the basic demands of the job as fairly straightforward. "There's very little effects work to do. Sometimes they might bring their own stuff. It depends if they're on tour or not at the time they visit. If they are, then they'll tend to use their own man. If not, then one of us will handle the mix. The main thing is to try and keep it down - we're looking for less than usual stage levels. You can always turn down the back-line, but you're still dependent on the drummer - you can't turn him down."

But as Westrop said: "Aerosmith didn't have a problem with it. Most of the bands approach the show in a sensible fashion." Westrop's set-up was typical of all the monitor positions. The standard JHE TV show rack contained eight two-channel C Audio graphics, Klark Teknik crossovers for the wedges (C Audio driven) and a solitary SPX990 for a bit of reverb for that 'room' sound. Wedges are either JHE's old stock of Martins or their own design (in collusion with EAW) JH15s, a low profile bi-amp 15" and 2" horn. "Eventually we'll replace all our wedges for TV work with these," said Harding. "They're much better for the camera shots, but they're not cheap, so it's a slow, steady re-investment."

'Investment' is probably the key here: for JHE it's more about experience than money, and that's a hard commodity to put a price on. For Holland the same applies - his experience in live music TV is unparalleled. That must be how he makes it look so easy.

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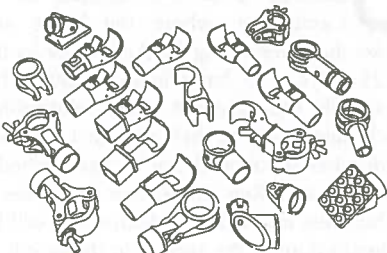
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**L**etter from America: As I said last month, we are in a period of considerable turbulence and change, from the removal to the dressing room of Peter Johansen earlier in the year, to the sending off of Richard Belliveau; from the sale of premier league Irideon to Fred Foster's ETC to the amassing of star players by PRG. All of which was reflected at LDI in Phoenix, where we were introduced to Martin Professional's new CEO Kristian Kolding, a man of a totally different cut from the company's progenitor. Though he denies the description of company doctor, Kolding has previously specialised in fattening companies up for market on behalf of a venture capital group. Kolding is not one for leading from the front, but I am sure that his calm and common-sense approach will bring a long period of stability to the company, if not to the industry where Martin has often been a destabilising influence in the past.

**W**e didn't get to meet High End's new CEO Frank Gordon - also a vencap man - but we did get the first scent that a settlement of the Vari-Lite patent case might be in the offing. Now, of course, we have confirmation (see news, page 6) which is a huge relief for all concerned. Not least me, since it means that I can finally write some of what I have been busting to say all along and for which the settlement proves the point. There used to be a time when people in our business talked to each other. As the telecoms companies are constantly reminding us, talk is cheap - if you are pissed off with someone it pays to telephone, fax, or e-mail and talk to them. Conversely, the most expensive telephone call you will ever make is the one that connects you to your lawyers. There is no shame in putting one's cards on the table. As I see it, this action has cost both protagonists millions of dollars, debilitating their facility to

do business in the normal way and, at the same time, taking several million dollars out of our industry. Patents should not be a blunt instrument to bludgeon others to death, but a means of facilitation for all concerned. Since, I understand, that the patents in question remain in tact, I trust everyone concerned will take note of this cautionary tale.

**B**elliveau was much in evidence at LDI; after all, he has a vested interest in the continuing success of HES, and I hope they will eventually reach some accommodation which will enable him to put his considerable talent to good use to the benefit of both parties. Meanwhile, rumours that he will open a men's fashion store in Austin are being put around by the man himself - purely as a devilish diversionary tactic. My eureka moment at the Show came when, courtesy of Steve Terry and Nick Jackson, and blindfolded by an embargo, I was introduced in person to the prototype of LSD's new and highly secret weapon, code-named Medusa. As with all best-kept secrets, I think by now everybody knows that it is a Digital Light Processor (DLP) based projector delivering all the benefits forecast by technology pundits, for the past several years and now made possible courtesy of Texas Instruments' miraculous million-miniature-mirrors-micro-processor DMD video chip. Of all the benefits, the promise of programmable gobos was born out in all its glorious technicality.

I have seen the future . . . now.

**T**he Americans do everything in a big way, so we should not have been surprised, during an informal shoot-out at dusk between rival searchlights in the piazza during LDI's terrific Show Party, when the killjoys from the FAA cut up rough. Initially, an official helicopter appeared and slalomed between the beams, wagging its comparatively feeble Helphos at the ground, NYPD Blue-style. It stood no chance against the massed arrays of beams from multiple Sky Trackers, a Dominator and a 10k RazorHead parked at the party's epicentre. Shortly afterwards, no less than four Phoenix PD police cars screamed to the scene to enforce restrictions. After all, the Show site was less than three miles from the airport! Only the RazorHead survived, albeit with a limited envelope, due to some hasty horse trading by Dick Hart, CEO of Xenotech.

**A**fter the fat lady had sung her last gasp on the Sunday night, my business partner Peter Wynne Willson and I headed for Vegas - not for the traditional R&R offered by the USA's number one resort destination, as they call it, but to get a peek backstage at the new Cirque de Soleil show resident at the monstrous new Bellagio Hotel. As you will have read in Rob Halliday's article (see pages 41-44), this new auditorium has been purpose-built to house the new aquatic super-show which the troupe are currently presenting to ecstatic audiences.

**F**irst, though, we couldn't resist the \$10 visit to the Bellagio art gallery where the owner, Steve Wynn, has collated together an extraordinary collection of impressionist and contemporary works of art. There are some 30 original paintings, generally one from each of the most famous artists of the genre from Picasso to Pollock, though there are two Van Goghs there and more Picassos elsewhere on the estate, so I'm told. Unbelievable, but what a place to come and see art, and are the Bellagio's customers really the sort of punters who will be interested? Mind you, Steve Wynn is not renowned for being wrong.

**T**his latter statement is born out by his devotion to Cirque, which has certainly repaid him several times over, and the massive investment in this new 'wet' theatre (or is it a bath house?) will, I am sure, be recouped in next to no time since they are playing to 6,000 show-goers in two performances daily. We were shown around by the ever-delightful Jeannette Farmer, assistant lighting designer. Not wishing to steal my colleague's thunder, I will simply say that LD Luc LaFortune and Jeanette have done a great job - it is a miracle of modern theatre technology deployed on a vast scale. The whole business of dealing with aquatics and a vast tank of H<sub>2</sub>O, where the stage should be, is simply mind-boggling. Or, as Jeanette would certainly say, the whole set-up is pretty 'Neato Freedo'.

**W**hile two PRG companies were involved in the Cirque de l'Eau project, which is some proof of concept, I am moved to note that the downside of Jere Harris's great project reared its ugly head shortly after LDI, when Livent Inc., filed for Chapter 11. Livent is the Toronto-based Broadway powerhouse production company behind *Ragtime* and *Showboat*, recently acquired by Hollywood wunderkind and ex-Disney president, Michael Ovitz and entertainment financier Roy Furman from founders Garth Drabinsky and Myron Gottlieb. Now, of course, it's a case of 'all fall down' and everybody is suing everybody else in a round of 'not my fault'. It would be surprising if PRG and its satellites didn't have quite a bit at stake in that particular farrago. But I do hope not.

**U**K Footnotes: All change here as well. Divorce is in the rarefied air of Cambridge, where the hinge and bracket that have swung the Pulsar door for the last 25 years or so, have finally admitted that the sparkle has gone out of the relationship which dates back to their days at Uni'. Paul Mardon has announced that he has reached a settlement with Ken Sewell over his shares in the business and that the decree nisi will be made absolute in the spring. In the words of the sultans of spin, Ken is leaving 'to pursue other interests'. Meanwhile, Mardon has already posted notices in the lonely hearts that he is looking for a new mate. Well it's cold and isolated out there on one's own!

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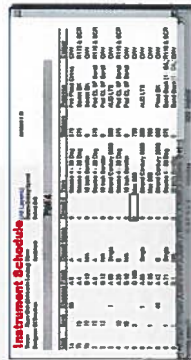
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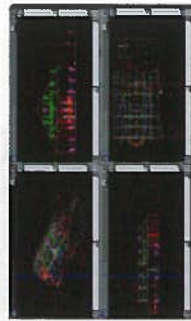
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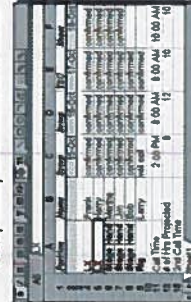
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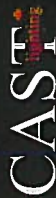
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# Second Take . . . *John Watt's view from beside the camera*

In my early days, this time of year would be the run-up to the Pantomime season and I would be scraping the contacts on the flash boxes, whilst the man from Kirby's Flying Ballet would be pestering us to leave a five foot gap between LX bars 2 and 3. So, naturally, my thoughts lead me towards a panto' script, which you can all adapt for your festivities on payment of a fiver to the above address - the money will go into my libel fund. Overseas readers who do not know the traditions of Pantomime, hard luck! But it goes a bit like this. Snow Watt and the Seven Sparks - Herbie, Ian, Stan, Alan, Peter, Keith, and Tom. The scene is set in an opulent castle in Teddington where three sisters live. Snow Watt is very beautiful but doesn't get much work as it's all hoovered up by her two ugly sisters, Gainsy and Pearcey. Snow Watt spends most days sitting in front of a red dipped 60W lamp, shaking a stick with strips of rag, trying to simulate fire light and keep warm. All day long, the ugly sisters bang on about the big jobs they've got coming up, while poor Snow Watt has to scratch a living from what she can gather up in the big unfriendly jungle outside - a Channel 5 talking heads show here, a *Question Time* there - barely enough to keep warm (Cue. audience to say 'aahhhh').

One day, the Ugly Sisters become all of a dither because they've got the call to do the *Eurovision Song Contest* and they can't decide what to do or what to wear. Snow Watt would love to help out too - work a spot, or make tea even - but the sisters just pour derision on her and say the expenses won't stretch to any passengers (unless they've got a suit) and she should be grateful for what she's got and just stick to *Supermarket Sweep*. Enter Buttons, a down-on-his-luck Chinaman, ex-BBC, Rimm Ing Ton, who is quite fond of Snow Watt. To console her, he tries to make them both a piece of toast on the 60W bulb. He sings a lament to her (Cue. 17, raise pattern 23 upstage right with leaf gobo, available from DHA for 30 bob) and holding hands, they dream of getting the call to light *Noel's House Party*, which they think (wrongly) would allow them to live happily ever after.

The next day, Baron Hardup, the executive producer on the *Eurovision Song Contest*, turns up for a planning meeting with the ugly sisters. They make pathetic attempts to endear themselves to him with promises of hundreds of moving lights, all with dozens of revolving gobos and more colours than you can shake a tweaking stick at and which he's never seen before (or will ever want to see again, probably). They fight over what colour wine to give him: Gainsy wants White, Pearcey wants Pink - what a commotion! Baron Hardup notices Snow Watt standing demurely behind a rough-hewn drawing board in the corner, idly sketching. He doesn't know, but it's an embryonic plot for the *Eurovision Song Contest*, and the distant look in her eyes is because she's wondering if her public liability insurance is up to date, as she

wants to gamble on a few less chain hoists on the front truss. The sisters refuse to introduce Baron Hardup to Snow Watt, as they once introduced a distant cousin - Joan Filff - to the head of light entertainment at Carlton, and they haven't worked north of Watford since.

Act two. Still in the kitchen. Snow Watt is really sad: the phone hasn't rung for days and there's not a thing to be found in the big bleak forest outside (audience: 'aahhhh'). Suddenly, there's a blinding flash and a puff of smoke. 'Damned main breaker again,' says Snow Watt, but no, it's her Fairy Godmother (actually John Pomphrey in a glitter waistcoat, holding a slightly bent Wand that has seen better days). "You shall go to the *Eurovision Song Contest*," she cries. "I know someone from Playlight who'll smuggle you in in a flight case marked 'Wind machine, use no hooks.' But," she says, "be out by midnight (overtime is a thing of the past) or you will revert back to being an ordinary low-life lighting director, dressed only in freebie t-shirts and living on lumpy canteen custard. Furthermore, the company limo' is needed by Greg at midnight."

So it came to pass that Snow Watt went to the *Eurovision Song Contest* and danced the night away, pausing from time to time to chat to the stars of stage and screen who believed her cover story that she was the lighting consultant really responsible for the massive rig overhead. A diamante-encrusted pan glass added authenticity to the story and distracted attention from the tight-fitting wine-stained frock which her Fairy Godfather John Treays borrowed from *Food & Drink*.

Such a good time was she having that midnight approached unnoticed, except by the band, who went into treble bubble. As the clock struck 12.00, she fled the building and headed for the car park, accidentally dropping her crumpled plot in the panic. (She had taken it along to confirm her worst fears that the ugly sisters had pinched some of her ideas - and they had! How else can you explain blue and pink backlight on the audience? It's never been done before - well, hardly ever. As for birdies buried in the flowers on the coffee

table - well, I rest my case.) Back at the car park, she was just in time to see the limo driving off with John Birt in the back holding up two fingers to a disconsolate Greg Dyke, now trying to explain to his date (Vanessa Feltz) that if they ran they could get a No. 76 back to hers - the only terraced house in Islington with an up and over front door.

Next day, back at the castle, while Snow Watt ironed Blackwrap for her sisters (consumables come out of their fees) they twittered away about the great people they had met. Gainsy had met Des somebody or other and Pearcey, always on the lookout, had met some woman who lives in a big house at the end of a Mall somewhere and who will soon be launching *The Liz & Phil Show* on ITV - once they've convinced the network they can beat Kilroy's ratings. The ugly sisters felt they had harmed their reputations not a jot, and if not honoured by Tony Blair in the very near future, would at least get an Elect Club gold card for PLASA next year.

Imagine everyone's amazement when, next morning, Baron Hardup turned up in high dudgeon (cheaper than the limo) clutching a crumpled lighting plot. "I shall get into bed with whomsoever's plot this proves to be, as it exactly fits last night's rig!" One ugly sister produces an old plot for *Blind Date* (most of us can) in a pathetic attempt to pass it off as the top rig for the *Eurovision Song Contest* (actually, there are similarities, but it doesn't bear close scrutiny.) The other finds a plot for *The Price Is Right*, but that fails to convince. Buttons, in an uncharacteristic show of forcefulness, suggests Hardup compare his plan with the Xerox copy on Snow Watt's drawing board. Despite protests from the ugly sisters the two plots are a perfect match. Good has triumphed over evil! "This is the one," cried the Baron, and swept Snow Watt off to his palace where they hope to live in one another's pockets happily ever after. Pity about Buttons, but you have to go with the firm booking. Meanwhile, the ugly sisters have got their come-uppance and are now reduced to revolving those screens on *Have I Got News for You* once a week. (Walkdown, spots on Snow Watt, Curtain.)

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# SECRET LIVES

*It was never a suggestion you gave your careers officer, but it was one of THE starting points for many in the industry. Ross Brown outs some DJs among us*

It's not the oldest profession - anybody undertaking it more than 30 years ago can definitely claim to be a pioneer - yet admitting to it in polite conversation often elicits the odd smirk and barbed comment. People are often surprised to discover that you used to do this job, or often still do, which has always seemed strange to me. Because whether it's a wedding, christening, birthday, Bar Mitzvah or just 'that special occasion' these people are the first ones you invite; they can make (or break) the evening and are the chief source of entertainment.

DJs have become an integral part of our leisure time. I'm not talking about 'mixmasters', cutting the BPMs of records together at high speed to keep a luvved-up crowd baying for more. Think of garish waistcoats, three flashing lights in a box and commentary revolving around a theme of "this one's for Doris who's 70 today," and I think you get the idea.

But what happens to these people when they grow up? Do they fit easily back into society, taking their place alongside the bank managers and the estate agents - finding themselves a proper job? Or are they cast back into the funny farm that spawned them?

Well, it seems to me that once they decide there must be better ways of spending a Saturday night, they undertake one of two careers: they become journalists (I wish to throw myself on your mercy at this point, I was young and needed the money) or they follow things through to their logical conclusion and start work in the lighting and sound industry. Indeed for some in the industry, they can blame the whole shooting match on their 'past' lives as DJs.

As someone who only worked a few years before the advent of CDs, just what was it like having to rely on a couple of Dansettes and a reel-to-reel tape deck? What would they think of today's technology and its proponents? And would they do it again?

A quick word, however, to the people I spoke to for this article that didn't want to be mentioned - too ashamed of their pasts as DJs: lighten up. People won't think any less of you for your past - your sales won't plummet; in fact, the pity vote may actually see sales of your goods rising... which isn't a bad thing.

The polar opposite of this attitude is good old Kevin Hopcroft of NJD, a man whose stories could have quite happily filled the length of this article. Everybody in the industry seems to know about Hopcroft's past: in fact everyone I spoke to said "you should try Kevin Hopcroft at NJD - he'll tell you everything." And how right they were.

Admitting to being "50 next," Hopcroft's DJ roots can be traced back to 1967, when he and



1974: Kevin Hopcroft spins the discs at the Parkside Club at the height of the glam(?) rock period (check out that outfit).

*"DJs never retire, they simply move into management. During the glory days they held the happiness of people in the palm of their hand - we've been one step away from omnipotence, and damn it's a great feeling."*

his friends were looking for a place to spend some time on a weekend. In one of those fortuitous moments that can change a life, Hopcroft senior offered young Kevin the use of his dancing school, situated in the cellar of the local church. By day it remained Mr Hopcroft's Dancing Emporium, but every weekend, Kevin and the lads converted it into the Junktion Club (the spelling is a long story), a spectacular in midnight blue and red, serving coffee and coke to the local multitudes with a paid-for DJ spinning the wheels of plastic.

"Back then there was no disco equipment; even electric record players were a bit of a novelty!" says Hopcroft, putting a new wax cylinder on the player. "So we cobbled together two Garrard turntables, ran them through a League 50W amp and into three homemade loudspeakers."

Hardly the cutting-edge of modern technology, but at the back end of the sixties it was enough to wow the folk of Nottingham and make the Junktion Club a success. Then, one night, the DJ didn't show up, and all eyes turned to Hopcroft to pick up the reins and the mic and entertain his people. You guessed it: the trial run was a success and the DJ was informed that his services would no longer be required. "If he had turned up, then I wouldn't have done it - and there'd have been no NJD,"

says a prophetic Hopcroft. Makes you think doesn't it? Nah, it doesn't really, does it?

After 10 weeks of twisting and whatever else it was they did in the late sixties, the Junktion Club met its end when Hopcroft's father died suddenly, and the church elders kicked out the young upstarts. But with a taste of the power of the DJ (all kneel at the altar of the disco king), Hopcroft was off in his powder blue trousers and pink jacket, first to Grantham ("They prop the dead up in bus shelters in Grantham to make it look busy," is Hopcroft's definition of the town) and then, swiftly, back to Nottingham.

At this point, he'd made a slight left turn on the equipment front, running two Garrard turntables through an Eagle mic mixer (ceramic carts plugged straight in) and a League 50W amp. "It was then

that mobiles started: so I built a great big wooden thing, the size of a desk and fitted it with my equipment. Sawed it in half - and I had a mobile unit," says our budding Alan Freeman. "Disco was still a dirty word, so I called it the New Junktion Record Review."

All went well for a few months (well, except for one occasion at the local railway club when a slip saw Hopcroft tobogganing down the steep steps with his mobile disco to make contact with the glass trophy cabinet at the bottom) and soon it was time to build the second set of gear... and acquire a new name. New Junktion Record Reviews didn't sound right, so New Junktion Discotheques was born.

This second mobile unit was, in (almost) Hopcroft's words, to be the dog's dangly bits and its spec was pretty damn impressive for the early seventies. Take two Garrard 401 turntables with SME pick-up arms, chuck in a Custom mixer, a cassette player, a radio, lighting for the desk in patriotic red, white and blue, electric aerials for the front and a 400W amp and you have something the like of which Nottingham had never seen - and nearly didn't.

"I'd built it in my mum's spare bedroom and once it was finished, we discovered it was too big to get down the stairs." One quick visit with Mr Screwdriver later and the whole thing was dismantled, taken downstairs and re-assembled.

He had the sound to shake the foundations of any building he visited, but the lights weren't quite up to the same level of technical expertise: "There was no lighting then. The nearest you got was maybe a UV tube in installations or a couple of red light bulbs - which were considered naughty, so always popular with young people."

Pretty soon, New Junktion Discotheques (or NJD for short, naturally) had 15 sets of

equipment, 30 DJs and was working 400 gigs a month, with Hopcroft rising to the pinnacle of DJ achievement when he did a six-year stint at a strip club working, I might quickly add, as a DJ, compère and comedian.

The comedy gig came via another non-attendance, when a frantic manager whipped young Kevin off his decks and upstairs to a function room where a room of well-oiled men were awaiting their evening of comedy. Knowing only one decent joke - of the 20-minute Ronnie Corbett with lots of asides variety - Hopcroft told it and brought the room down, just as the absent comedian entered the room. Like the professional he is, Hopcroft introduced him and the comedian told his best joke to an already happy audience. Quite what their reaction was to hearing the same joke again remains unrecorded. "I knew I'd ripped it off someone, I just couldn't remember who," is our former DJ's defence.

Things were getting frenetic and a site to store the growing amount of gear was quickly acquired. 'Why get a lock-up? We'll get a shop and sell some gear,' was the consensus of opinion - and then came a call for some ropelights - could NJD make them? The rest is probably the stuff of DJ-lore, with the manufacturing taking over and New Junktion Discotheques performing its last gig at the beginning of the eighties.

So, 15 years after the event, what does Hopcroft think of today's DJs? "I have no love of mixing! Mixing one record into another is a skill, not a talent. People should know you're the DJ when you walk into the room, not when you start playing," he says. "Being able to read the audience is the talent - now we've got DJs as technicians and that's not for me."

There was obviously something in the air in the summer of love, 1967, because a few miles down the road in Welsh Wales, current PLASA chairman (see - even the mighty have succumbed to the DJ-dollar at some point) Paul Adams took up his toolbox and built his own disco gear. Two plastic turntables (make unknown), an Eagle mixer (carts plugged straight in, naturally) and some handmade speakers with Fane 12" cones were the Adams method of raising money for Swansea's Hospital Radio. Again the bug stuck its teeth in



Mr Hopcroft in Mod mode. This picture was taken from the front cover of the March 1968 issue of 'Scooter World.'



Oh dear. Current PLASA Chairman Paul Adams - no comment necessary we think.

quick and the Adams-family pride was quickly usurped by a professional console from SIS in Warrington, with lights coming courtesy of a couple of Par 38s in handmade boxes, and a controller from Pulsar.

Gigging in and around Wales became easier with the acquisition of a Citronic SM506 mixer with Garrard SP21 turntables (my first decks too!), a trusty reel-to-reel for jingles and four EV boxes. Dammit, it was time to don the platform boots, cover yourself with glitter and stomp around to Glam Rock, for it was the mid

seventies, the time that taste forgot.

Filling in the bits before and after the likes of Showaddywaddy, Mud, Hot Chocolate, The Rubettes, the Glitter Band and Leo Sayer, Adams was regularly playing to 2,000 people every Saturday night at the Glen Ball Room in Llanelli. Working with a 12-piece band (The Clownsman) meant that young Adams often came a close second to the band's mischief.

"It was always a 'keep music live' situation - with the band nicking my records whenever my back was turned," he says. With his equipment taking up one half of the revolving stage and the band's the other - all very Sunday Night at the London Palladium - Adams wreaked his revenge when one of the band members 'availed' himself of some of the trappings associated with musicians (namely a groupie) and decided that the band's side of the revolving stage would make a good place to demonstrate his affection. As is their wont, the revolving stage revolved and 2,000 happy Welsh people were entertained by the sight of a bobbing bottom.

Despite his personal attempts, does Adams believe that the DJ has played his part in the death of live music? "DJs are about personality - and that's what I was. Today it's all about mixing; in my day it was blending rather than mixing, although there were certain records that you could cut together. It wasn't invented in the eighties you know!"

Since 1982, Adams has run the highly successful PA Installations, based in South Wales, which recently completed the final phase of a move into a new 10,000sq.ft independent unit on Llanelli's Dafen Park. It is just over a year since the company first relocated from its small Inkerman Street facility to the new purpose-built offices which, over the intervening 12 months, have been extensively refurbished to provide in-house fabrication facilities and a technical workshop, as well as a high-tech design department and suite of offices that Terence Conran would be proud to lend his name to.

The completion of the move marked a major milestone for the company, who just last year pooled resources with Richard Vaughan of Vaughan Sound Systems to create a new company serving the pro audio and conference markets. That new enterprise - Vaughan Sound



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Installations - has also relocated to the new premises where the two companies, though independent of each other, now operate side by side. At about the same time, Adams announced another initiative - the formation of a third company, PA Technologies, which will pursue a communications brief and will provide custom computer solutions to



Too shy to send a pic of his glory days, David Graham (centre) on stand at a recent PLASA Show.

underpin PA Installations' specialist installation work. Not bad for an ex-DJ eh?

Adams' earlier story about the band member caught with his pants down set me thinking about whether this had been the prime motivating factor of many a young DJ. Not that I wish to cast aspersions upon this noble cast, but it does seem that strippers and dodgy sex with groupies were core constituents of 'ye olde' DJs - not that I'm bitter about anything - but surely it wasn't all about sex? Surely some people did it for the love of music?

Thank the Lord for David Graham of Soundvision. "I loved buying records and the DJ'ing paid for the records," he says. A self-confessed 'soul boy', the early eighties was Graham's time for a little bit of DJ culture, working with, of course, a couple of Citronic decks (with autotune!) and some Custom Sound speakers: essential gear for any self-respecting DJ at the turn of the eighties.

"I've got two big loves," he says, "sport and music - and I decided to keep sport as a hobby." Although his DJ'ing career was relatively brief, he still finds himself at parties thinking "I could do better than that", and defends his actions with a simple rationale: "It's a phase of life you go through. DJ'ing was a logical progression from buying records - but you can't be playing to audiences of 20-year-olds when you're in your forties."

Some would strongly disagree. But what you can be doing, of course, is running a successful sales and installation company which counts well-known manufacturers such as Roland, Yamaha and Akai amongst its list of distributed brands. Soundvision's contracts and



Rick Wilson, the artist formerly known as Rick Hawkins as he is now.

installation division offers a complete service from design and supply of audio and lighting systems, through to installation, training and service. Projects vary greatly from background music systems for wine-bars, pubs and restaurants, through PA systems for retail stores, recreational and leisure venues, up to high-powered sound reinforcement systems for nightclubs and discotheques.

Although he denies the tag 'DJ', the last member of this motley crew is difficult to categorise any other way. Admittedly, his work was more "hey, hey mama" than "chirpy, chirpy, cheep, cheep" but when a guy is paid money to play records and gee a crowd up, I'm afraid 'DJ' is the most suitable sobriquet going.

Step forward the DJ formerly known as Rick Hawkins, but now better known - for reasons too lengthy, and possibly litigious to go into here - as Rick Wilson of Le Maitre. Back in '68, Wilson teamed up with well-known industry figures Jerry Floyd and Jeff Dexter (who went off to manage country-rockers America) to perform what Wilson terms "heavy sounds" before and between the sets of bands like Led Zeppelin - and other such stadium Gods.

He'd done a few clubs for the infamous Arthur Frost Organisation ("I actually turned professional, I got so busy," he admits), running his wheels of steel through à Marshall 50-watt and two 10" column speakers.

Entering a DJ competition organised by Brian Mason, Wilson found himself winning a six-month residency on Majorca, the actual details of which he would rather keep quiet!

Moving up to WEM Amps - the amp of choice for the late sixties rocker, I am reliably

informed - Wilson returned at the start of the seventies to work with up-and-coming acts such as David Bowie (just entering his Ziggy Stardust phase) and Roxy Music. "Roxy were supporting Bowie that night, and I actually got paid more than they did," he gloats. Do you have Bryan Ferry's money now, I parried? "I bloody wish," came the bitter reply.

The kings of the three-chord boogie were next to feel the Wilson charm, such was the power of his 200W stereo amp that, as well as powering his twin Garrard SP25 Mk2s, the mighty Quo ran their sound through his gear as well. The role of the "heavy soundsman" disappeared almost as quickly as it came, and Wilson found that he was a man whose talent was without a home. "I'd love to do it again, but it just doesn't exist anymore," he says through the tears.

The modern face of Le Maitre is a far cry from those days. The company have been manufacturing pyrotechnics and smoke machines for over 20 years. The UK (Mitcham, Surrey) and Canadian (London, Ontario) factories produce the company's range of smoke and dry ice machines, hazers and pyro controllers, whilst the Peterborough fireworks factory produces the world famous range of Pyroflash cartridges and the new range of professional stage pyrotechnics, as well as military devices and display fireworks.

The role of the DJ may have changed out of all recognition since our former stars last span a record. These days it's more cutting and beat-mixing and less about personalities, more sweat, less 'fun', but the role of the DJ - in its real sense - is a skill and a service that will never die. DJs never retire, they simply move into management. During the glory days, when they had a full head of hair (most of the above still do, I should report), they held the happiness of tens, hundreds, even thousands of people in the palm of their hand. We've been one step away from omnipotence, and damn it's a great feeling.

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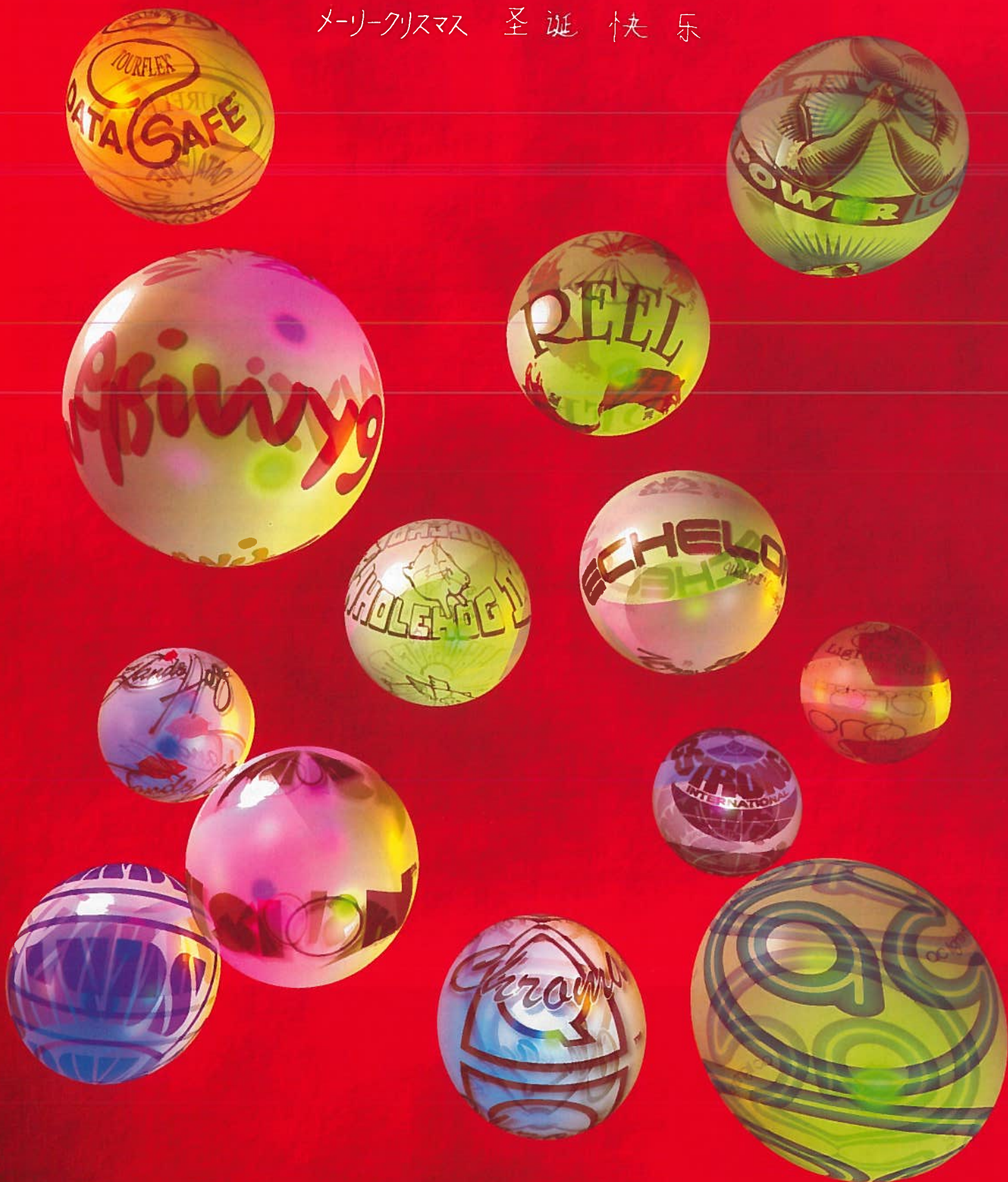
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# ON TOUR

by STEVE MOLES

## AND PRODUCTION NEWS



### Page & Plant

Manchester Evening News Arena

**LD: Tom Kenny**

**SD: Dave Kobb**

"You know there's an average 200 hits a day of 'Stairway to Heaven' on US radio stations." So said Page & Plant's LD Tom Kenny. Perhaps that's why he was able to follow this statement with, "They'll give me any budget I want for lighting." Which is doubtless true, but not a fact he takes liberty with. More to the point, for people of a certain age, the core members of Led Zeppelin are an enduring talent. The strange thing is that like a lot of 'old bands', and I use that term advisedly, they find that they can no longer shift albums like they used to. 'Return to Clarksdale', Page & Plant's latest album, was well received by the music press, garnering much praise for the freshness of its content. Despite this, sales were poor - not just here, but in the US also, yet as Mr Kenny pointed out: "They (P&P), along with Eric (Clapton), the Who and the 'Stones, are the only people who can sell tickets properly. They can go anywhere in the world and fill arenas."

As their much-maligned former manager Peter Grant secured them perpetual wealth by skilfully ensuring that the band not only held copyright of their material, but also the producing and engineering credits of every album, you have to conclude that they really like playing live. They certainly don't need the cash. Their pull is unquestionable: this was the fullest I've seen the Manchester Arena (now the Manchester Evening News Arena, Nynex having found more urgent requirements for their money) since the heyday of Take That.

"Well," said production manager Roy Lamb, "we have been out since March and so far we've probably only played 60 dates," which may go some way to explaining why this is the fittest I've

seen Lamb in 20 years. More to the point, Plant's vocal range has diminished not one jot since they recorded Led Zep' one back in 1969. Along with Paul Rogers, Plant is arguably 'the' classic rock voice of the century. And while Jimmy Page may have to contend with Clapton and Hendrix for guitar supremacy, there's no question he's in astonishingly good form. Compared to their first outing together three years ago, his playing is more confident and creative, producing flourishes of sparkling intensity that contain nothing of the pomp and indulgence that humbled lesser axe heroes in the past.

### LIGHTING

As for Tom Kenny's lighting rig? Well, in view of his earlier statement, you have to have some sympathy for LSD the lighting supplier. "This is a neo-sixties system," says Kenny. "We started the tour rehearsing in Zagreb with just 16 Icons and a box truss. Jim and Robert liked it so much they said 'let's do the whole tour like this' and we have." Although Kenny has, in fact, increased his Icon count to 26, this is a remarkably small show for a sell-out arena tour. "The whole point of it is minimalism," continued Kenny. "There's no orchestra as featured on the last tour, or the Egyptian ensemble. They were just props last time around and now they (the band) feel they don't need them. Not that they ever did." A sentiment repeated by Lamb later that evening.

The rig is simple to behold: a 50ft by 35ft grid with 90 Pars spread about it. They don't even carry a backdrop, Kenny relying on the house black wherever he goes. The Icons are divided 50-50 between floor and truss, the floor-standing lamps split between stage level and five vertical truss sections across the back. With a nine inch drum riser being the only other item above stage level, it's apparent just how extreme is the desire for minimalism, a fact backed up by just four Edwin Shirley trucks outside - surely the smallest rock and roll package ever to enter this arena? Not

that Kenny's show lacks scale. With the varied Icon positioning giving full depth to the playing area, and with the lamps widely spread above, he does create massive looks.

Alistair Brammel-Watson programmed the Icon console and operates, Kenny running the conventionals off an Avolites Sapphire and calling the followspots (four Super Troupers in the house, two Lycians on the rear truss). He starts his show with the two back spots and just a pair of Icons back-lighting from on high stage left. As 'Wanton Song', the opener, develops, so Kenny increases content until the stage fills the end of the arena and the lights extend way out into the auditorium. Where he succeeds in bringing variety to his show is in tight cueing for the drops, which, with Page on top form, are abrupt and require rapt attention. And also by recourse to simple devices, like when he put the floor Icons up onto the cliff-like surface of the flown PA for 'Clarksdale' - easy to do, it put a huge frame around a big song.

### SOUND

This is a Clair Brothers tour, which must be to the eternal chagrin of Showco who derived a lot of their stature as a company from touring acts from Zeppelin's SwanSong label in the seventies. Dave Kobb is at the controls, a pleasurable job for him as he explained. "This is like the Fleetwood Mac tour I did last year. Both tours have gone back to featuring on the music. It's concentrated and focused, which is refreshing to me, being an old fart." A sentiment I can identify with wholeheartedly, being one myself.

It's possibly best not to say too much about the sound, not that there's anything wrong, but Kobb by his own admission likes to "leave it alone". A reference to the natural dynamic that emerges from the stage which requires little embellishment from him. Like Kenny, Kobb does apply the retro wand to this magic, sixties effects demanded by the older song book, though he did draw the line at a tape echo - "Just too noisy and unreliable."

Effects aside, the PA benefits from this being as stripped back musically as it is production-wise. This is for most of the evening just a four-piece, (with occasional guest keys and mandolin) the rhythm section of bass and drums being tight. The drummer does perhaps lack subtlety if not enthusiasm, but the vocals and guitars shine through. For a very loud show, which is exactly as it must be, Kobb's mix is big, Page's guitar especially filling across the full bandwidth, making the whole listening experience more than the sum of its parts. All this from a Yamaha PM4000 running a bunch of old S4s (just 24 a side if you must know, which is good going for the largest room in the UK). OK, so I'm a fan, but there's a lot this approach to sound can teach a person, like when to leave it alone, and as Kobb said, "don't try and mix as if it's for an album."

As for not shifting albums, that appears to be a malaise affecting not just the supergroups, but the entire record industry. Which, of course, has many implications for the live music industry as a whole. But that's a conversation for another day.

## Blondie

Sheffield City Hall

LD: Nick Sholem

SD: Dave Lester

Blondie might be just another group cashing in on the penchant for youth re-visited, but musically they do represent a unique entity. When they peaked at the end of the seventies with 'Parallel Lines' it was a regular occurrence to see swarthy men sporting Mohawk hairdos, tartan bondage trousers and pins through their noses jump on stage and dance. Ironically, this show was little different, although the two men who made the leap were, shall we say, superannuated punks? Why Blondie got caught up in the punk movement is frankly a mystery; Chris Stein (Gits) and Jimmy Destri (Keys) were responsible for producing some of the most well-crafted, and commercially successful pop songs of the era. If they were punk, then they were the Abba of punk. So a classic repertoire to draw on, but then a quick conversation with Clem Burke (Drums, and my old employer back then) revealed that they have just recorded an album of new songs. On hearing two of them performed I have to say they still having something valid to offer.

### LIGHTING

Watching the way Nick Sholem lit the band, or rather how he dealt with the constraints placed upon him, gives some clue as to how Blondie distanced themselves from the pure pop idiom that is their natural habitat: "When they first approached me," said Sholem, "it was a case of no flash, no moving light, and they didn't want loads of colour everywhere." So slap up a few open white floods and take the money then Nick? "Well no. Luckily we started off by doing some club gigs around Europe, those 'turn up with a bunch of gel and nothing else' kind of venues. Seeing them live in that environment I realised they still retained that edgy rawness they had in the seventies. Although they didn't want wiggly lights, I was able to persuade them."



Even so, this is an art school show. Sholem's rig from Bandit Lites is minimalist to say the least, there are so few lamps up there that the front truss is old Rowen truss - that's a piece of radio mast to you and me. Three trusses stretch across stage: the front has just two Martin Mac 600s, the mid has two more plus two Cyberlights and five Pars with Colour Faders, and with a little more muscularity, the rear truss has four more Macs and five six-lamp bars of Pars. Sholem produces a largely monochromatic look, most scenes taking place in a combination of white, CT orange and/or CT blue. He did manage a couple of brief passages in heavy colours - other colorations used resided down in the Straw and Bastard Amber domain.

What gives the show its dimension is angle of incidence, and variety of position. Sholem also has three Pars at head height each side of stage (c/w Faders) and the band members have a pair of floor lamps, a combination of 1kW QI floods and a single Par (there were also some ACL fans on the floor behind them. With no stage set to speak of, and add the band's stage clothes - black trousers, white shirt, black tie - the whole look is retro.

Sholem operates from a Wholehog II: last time we saw him at this console was with Yes, when he had well over a thousand cues to execute, requiring two hours of concentrated effort. This was quite obviously 90 minutes of pleasure - no less busy, but being pop, the lifts and accents are

well signposted. Minimalist? Well yes, the high point of the evening was a Chris Stein solo, but this was only four shows into the tour with this rig and already Sholem had managed to find a different combination of the same palette for each song.

### SOUND

Dave Lester has the happy job of mixing the band. The Prism system from Showco is not ideally

suited to this venue: Lester went to great trouble to make the PA cover as well as he could, a pair of cabinets each side for the top balcony, a single either side for the middle (really just for the extremities), and five a side plus four subs at stage level. Beside the now usual centre fills for the front rows, Lester also added another pair out on the wings: "Just to cover those 15 or so seats way out there." And Lester's not a white glove engineer who has some lackey deploy the system - he's FOH and systems man on this tour. Despite his efforts, he did admit disappointment at finding varying sound zones around the room.

Even so, he always achieved his primary function. Debbie Harry's voice was always clearly there on top, and from the sweet-spot by the desk where I sat, the solid rhythm section and interplay between Stein and Destri never fell off. He mixes from a Harrison HM5, using the Prism drive system, with minimal effects and some obvious tools for dynamics. "I have a pair of H3000s, one just for delay on her voice, the other for some stereo imaging, also on vocals. There's a PCM80 for a bit of reverb on her vocals, split left and right just to broaden the image, plus TCM500 for reverb on the drums."

Harry's vocals being the major focus there's also a Drawmer 1960 Tube Compressor dedicated to her, the backing vocals and bass guitar run through DBX160As and there's the usual Drawmer and Aphex gates on the kit. "My biggest job is paying attention," said Lester, "there's a lot of little subtleties happening all the time - melodic rhythm stuff from Destri and Stein. They might over-play a bit on stage, so I work a lot on keeping the levels right." Considering Jim Ragus on monitors has a huge pair of side-fills each side, and every band member has wedges (though Harry and Destri are both on the Shure PSM600 in-ear system) the levels coming off stage are quite muted. The kit - cymbals particularly - is dampened by having lots of carpet around and beneath it, thus Lester is able to maintain comfortable levels in the room, and more importantly, Harry is able to pitch easily so she never sounds strained. "The whole thing is Debbie's voice," agreed Lester, though you have to say it's her, plus her voice. As a pop icon, Harry always had that look of slightly soiled goods - classic beauty, but tainted. When she sang the new song 'Screaming Skin', she did as good a Deitrich as the tobacco-stained larynx of Marianne Faithful. The instrument might not project the way it did, but the personality sure does.

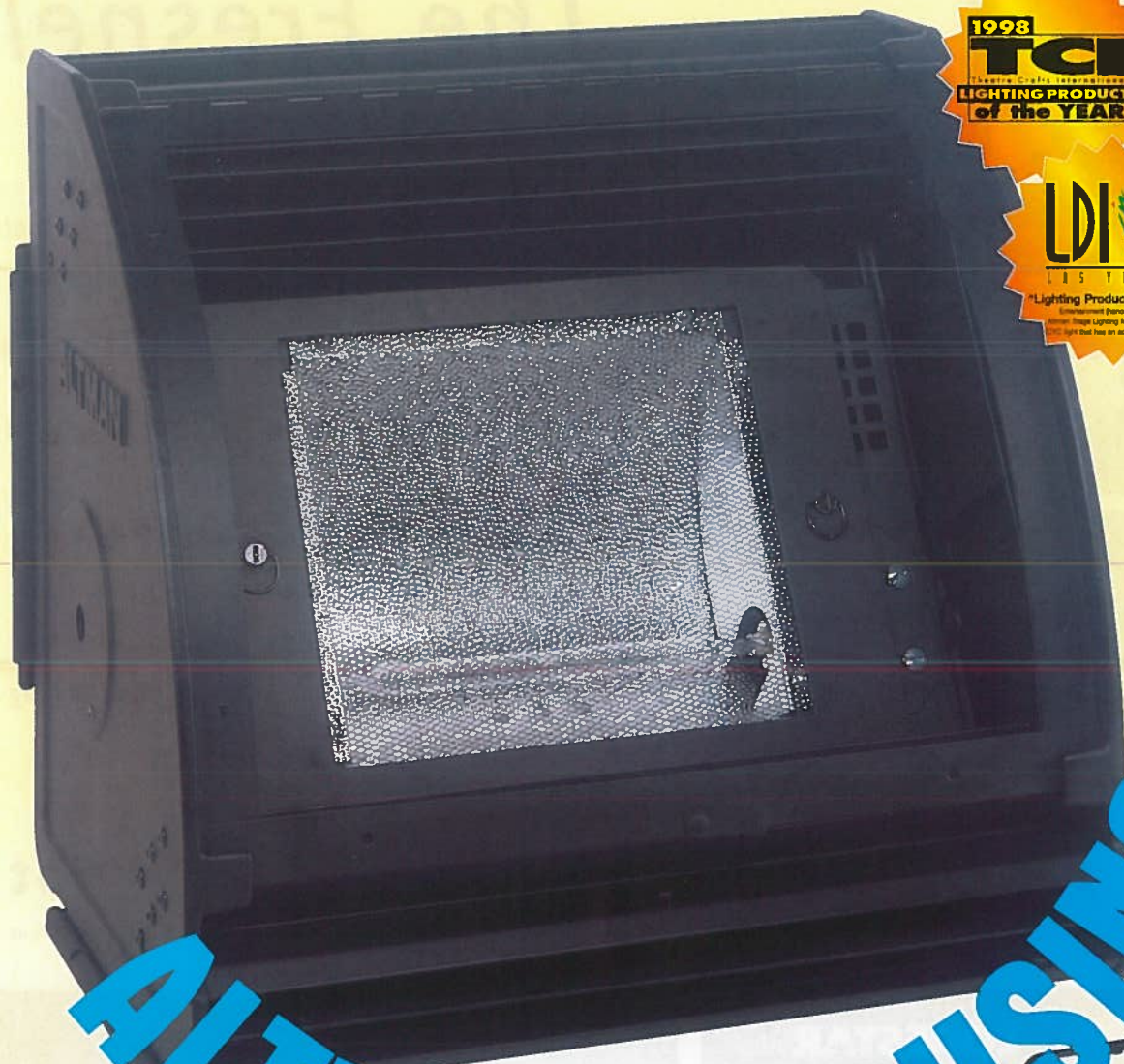
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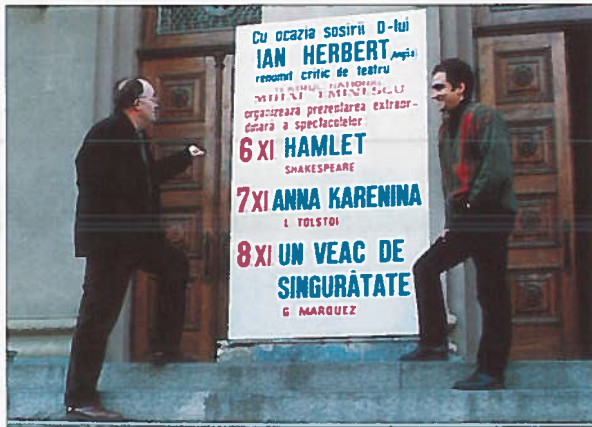
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# Acclaimed in the Stalls . . . Ian Herbert

It's a wee bit disconcerting to arrive on an innocent theatre-watching trip and find you're top of the bill. It's even worse if you find that you're topping what may be the theatre's last bill for quite a while. Outside the Mihai Eminescu, Moldova's National Theatre, in the capital city, Cisinau, I was embarrassed to be confronted with a large billboard welcoming the distinguished critic Ian Herbert to a special weekend programme of three plays. You probably don't even know where Moldova is, and I must confess I was a bit hazy about it myself. For your information, it's right between Romania and the Ukraine, with a largely Romanian-speaking population of some four million, although as a member of what survives of the Russian Federation, it has its share of Russian speakers too.

The Mihai Eminescu is a thirties building with the almost authentic look of a late nineteenth century theatre - it could be the Maly in Moscow. Originally an officers' club for the short-lived Romanian monarchy, it only actually became a theatre after World War II and was handsomely restored over five years (conveniently including the fall of the USSR) to reopen in 1992. The upstairs rooms are let to an Austrian consortium who run a casino there. At ground level, a comfortable 450-seater house, with pit and two circles, fronts a good deep stage bounded by a boxy proscenium that can trap sound. (For the three productions I saw, the sizeable orchestra pit was covered, which gave the actors a chance to come right downstage and escape its confines.) The permanent acting company numbers 40 or so, and there is a 20-piece orchestra used for the occasional musical: a lively version of *A Funny Thing Happened on the Way to the Forum* is in the current repertoire.

Artistic director Sandu Vasilache took over the re-opened theatre on the strength of his work with the Pocket Theatre, one of a handful of other small groups working in the city (there are only three or four other venues in Cisinau, and one theatre outside the capital). Because he was starting from scratch, he has a younger company (and indeed a younger repertoire) than most other theatres in the ex-East, most of them trained in the prestigious theatre schools of Moscow, as he was, and Tbilisi. For patriotic and political reasons they play only in Romanian. Actors in Moldova have a certain security in that they are permanently on the theatre's staff. However, their monthly wage, about half that of a doctor, translates at about \$30 - or at least it did until a week before my arrival, when the currency halved in value. It's all a little academic really, since they haven't been paid at all since August.



Sandu Vasilache (right) welcomes his distinguished visitor.

The first thing you notice when you enter the theatre is that nobody is using the cloakroom. Coat-dumping is a serious ritual in the cold countries of Europe, but here the audience keep their street clothes firmly on. It turns out that the Government is in control of the theatre's heating system. Last year it was October 15th before it was turned on. Now, here we are on a very cold November 6th with no sign of the Man from the Ministry with his match for the boiler. Neither the auditorium nor the actors' quarters, let alone the technicians' hovel, is heated. There will be no more performances after my state visit until the Man comes. Nor is the stage overburdened with lights. There are a dozen or so pretty basic floods on either side of the pros, and some bigger ones on the bars over the stage. A followspot can be operated from the lighting box, at the back of the dress circle. As it happens, it wouldn't help much if the whole theatre were festooned with lanterns. When I see the board, I discover that it can only take about 40 circuits because that's all the voltage they have - the Casino has probably eaten the rest.

And what a board. It's a Russian job, with fingertip dimmers like the old Strand consoles I signally failed to work 40 years ago at the Cambridge ADC. It's probably about that age, too, though of course bigger, with 120 dimmer levers (only 40 of them in use, for reasons already mentioned) on each of its twin boards, allowing four presets. The lighting operator tells me that when a Japanese company visited the theatre last year (carrying their own very modern sound kit in the equivalent of a couple of suitcases) they took lots of photographs - they'd never seen a board like this one except in theatre museums. He also tells me that he doesn't like lighting plots where cues come less than two minutes apart. I expect you'll have worked out why.

None of this stopped Sandu Vasilache from making good use of light in the three shows I saw, although there were

rather more snap-on, snap-off states than you might expect elsewhere. Scenery is hard to come by, so light is very important in creating stage atmosphere - light, and the precision use of a Greek-style chorus. Actors are cheaper than scenery.

In *Hamlet*, the chorus were mute observers of the events at Elsinore; in *One Hundred Years of Solitude*, a lively version of Marquez' epic Colombian family story, they supplied all the characters in true Shared Experience style, slipping back into group dance to drive the action along; in *Anna Karenina* they were a top-hatted, cane-wielding group of literally faceless bystanders, their features masked by dark chiffon scarves, narrating and commenting on the actions of the four principals - Anna, her husband, lover and child.

These old people stomping the stage, one or two of them occasionally collapsing for no apparent reason, were reminiscent of the groupings used by Silviu Purcarete, the Romanian superstar director and wizard of the chorus, notably in the *Oresteia* he brought this autumn to the Barbican. But *Karenina* precedes Purcarete's *Oresteia*, and indeed Vasilache, as assistant director on the latter, could claim that the influence is not all one-way.

The Moldovans would love to visit the Barbican, too, and they wouldn't be massively out of place there. Their *Hamlet* has already been very well received in a number of international festivals, although it has several features that might baffle more conservative English audiences, including the fact that Yorick has almost as big a role as Hamlet.

I tried hard to explain to the company administrator, Vitalie Caraus, that there wasn't much I could do to get his company to the Balls Pond Road, let alone the Barbican. "Whatever it may say on your splendid billboard, I'm not at all important. I feel as if I'm here under false pretences." "No, no, what is important is that you have come. Nobody from outside this country comes to see our work, and we want it to be known. If you can tell about us when you go home, that will be enough."

So, I'm telling about them. It was even more embarrassing when they paid my fair fare, in crisp sterling notes. I was almost relieved when some Heathrow baggage-handler liberated the money from my bag, until I thought of all the actors who could have been paid if I'd just left it behind in the theatre.

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# LIGHTS OUT WEST

Tony Gottelier and Lee Baldock report from LDI 98 in Phoenix, Arizona



David Summerland (left) and Scott Callis of Mad Lighting announced the opening of the company's US office.

There were fears that Arizona might not prove to be the ideal location for this year's LDI but, though visitor figures were lighter and the food hotter (i.e. Mexican, Mexican and more Mexican), in every other way the situation proved to be pretty good. Mind you, we floor-walkers could have done without the long, narrow hall - everything always seemed to be at the opposite end to where you were at the time and it was a marathon.

As usual, this show emphasised the gulf between the US and the UK, divided by both a common language (as in "Soup er salad?" British Visitor: "What's in the super salad?") and uncommon electrical standards. This was marked by the different raft of winners of the senior awards at LDI, as opposed to those products which won at PLASA. **Vari-Lite**, which incidentally made a big statement with its booth this year and took away a trophy for that also (although shared with Martin Professional), and whose excellent new product the VL7 was a winner with its extraordinary 8:1 zoom, was perhaps less lauded in London because it was considered that it would have less overall influence in the European market than the eventual winner. Similarly, the other joint winner of Best Lighting Product at LDI, the Source Four Zoom from Fred Foster's **ETC**, was pipped in London possibly because the tradition for ellipsoids is somewhat different here. While other winners at LDI'98 are listed on page 75, we would just single out the new Windows version of the well-thumbed Lightwrite which will, no doubt, improve the quality of life of most theatre LDs. The other is the **Philips** CDM lamp, which was voted best Architectural Lighting product for bringing much needed long life to metal halide bulbs, and for being the inspiration behind a range of new fittings from various luminaire manufacturers. The lamp makers need all the encouragement they can get to continue their support for the entertainment lighting biz.

Presciently, I think we may already be in a position to forecast next year's winner of Best New Lighting Product. Although they weren't exhibiting independently, except under the umbrella of new owners **PRG**, persistent rumours that **LSD** were sneak-previewing a working prototype of their Medusa project circulated around the hall. Amid conditions of strict security and much cloak and dagger, we were granted an audience with the mythic beast off-site. We



A line-up of British notables, L-R: Philip Nye (DHA), Nikki Scott (Stage Technologies), Matthew Tonks (Glantre), Bryan Raven (White Light) and L+SI's Rob Halliday.

agreed restrictions as to what we could say, but we are able to confirm that Medusa will be the first video-graphics-based automated entertainment luminaire when it is officially launched in the spring of next year. The days of the programmable gobo are here at last, courtesy of LSD and Texas Instruments' DLP (Digital Light Processor); indeed, whether gobos can continue to be described as such, when they become video gobos, must now be open to question. It's a brave new world.

The weather in Phoenix helped, and LDI threw a terrific outdoor party which was much enjoyed, while **High End**, **Martin Pro** and **ETC** also entertained lavishly after hours. What is curious is, that with the workshops and seminars stretching forward in the calendar (they start a day ahead of the Show itself), LDI the exhibition is fast becoming a two-day event. If it hadn't been for the awards ceremony, most exhibitors could have afforded a lengthy lie-in on the Sunday morning. Mind you, it would be tough to get around the whole show in two days and at the same time catch up with all the new stuff, especially if one also wanted to attend a couple of seminars. So, we're not sure how it works out for the average visitor.



Following Vari-Lite's sale of Irideon to ETC Fred Foster of ETC and Vari-Lite's CEO Rusty Brutsché are pictured on the Irideon stand at LDI.



Dave Higgins of Gray Interfaces with the award-winning Ultimate DMX Converter.

**Clay Paky** were reinforcing their attack on the US market through Group One with the new 'Stage Line' range of six moving heads with models for both colour wash and directional effects projection. **Coemar**, on the other hand, launched a club version of their NAT Total Movement (TM) under the Tas banner called TX360°B with a reduced scale, twin axis, double mirror head at the front and with, basically, updated Mini Ultrascan optics and effects behind. While this seemed slightly out of step with their US partner Obies' market sector, who appear more suited to the 4kW TM and the CF1200 moving head projector, this would have been a winner in Europe if it had been launched in time for PLASA.

Meanwhile, that other Italian company **FAL** were hiding their lights, not under a bushel exactly, but in a demo room with no link to a stand in the hall. A decision they may have come to regret in retrospect. Mind you, so were **Buhl Industries**, whose new range of energy efficient fresnels and softlights for television studios, based on the Philips CDM lamp, caused quite a stir.

Although we weren't expecting anything, it would have been surprising if **High End Systems** had not come up with something completely new, other than the previously-launched Studio Spot for this show, which is, after all, in their own back yard. What we got was a first look at the junior versions of both Studio Spot and Studio Color driven yoke units. Relying on the proven optical configuration and lamp of the Technobeam, for which HES claim a light output of 7000 lumens or 28 lumens/watt, Studio Spot 250 also offers the attributes of the Technobeam in twin axis configuration. Studio Color 250, with the same yoke mechanism, offers CMY mixing, plus six add-on colours for saturates, CTO and blacklight, plus zoom and beam shaping. One little aside in connection with these two new units; Mike Wood was keen to draw our attention to the fact that these new models now have both 5 and 3-pin XLR sockets for DMX purposes. And not before time say we!

**Laser Media** were putting themselves about again having come up with a range of affordable small scale laser systems based on solid-state laser diode technology. LM's ebullient Harvey Plotnick believes that these new StingRay systems, which range from five milliwatts to 150 milliwatts and are all air-cooled, represent a big opportunity for his company as the lower power systems may enable



Pictured above, left to right: Garry Nelsson (left) and Bev Bigham on the Lighting Technology stand; the new Solaris, a high-end modular lighting control console from AVAB transtechnik, recently installed at the Volksoper Opera House in Vienna; Avolites' Steve Warren (right) demonstrates the company's new Visualiser virtual programming software to a visitor; Rosco's product manager Joshua Alemany with the new Prismatic gobo range.

LM to get a variance from the stringent US rules governing the use of entertainment lasers. If he is successful, he will open up a huge potential market for indoor venues. Laser Media has also developed a 2.5W laser diode system using Laser Power Corporation's Micro-Yag air-cooled laser for show use, for which the company claims an output equivalent to a 5W water-cooled system. All these units generate monochromatic green beams, while Laser Power Corporation added red and blue to their units in the low power category.

Of the several fibre optic manufacturers, **Lumenyte** stood out as the company with the most improved light transmission for its solid core, side-emitting fibre. A new generation of purer materials and improved production techniques have all contributed to this advance which has enabled Lumenyte-Stafflex 500 (the fruits of the company's partnership with 3M) to overcome the problems associated with their original material, including those caused by heat. Another new product, Lumenyte LEF, is offered as an alternative for fluorescent or neon lighting. Most fibre companies now have their own illuminators, and Lumenyte are no exception, as are **Super Vision International**, who also exhibited. There were also several dedicated illuminator manufacturers present including **Remote Source Lighting** and **TPR Enterprises**, both of whom also offer fully DMX controllable colour and effect sources.

Among the raft of new products announced by **Martin Professional** (which included the MAC 250 and others announced at PLASA originally), the most interesting debutante was TrackPod. Based on Lighting Director, and licensed from the same source, this device brings the human touch back into automated followspotting, whereas the previous package and Wybron's Autopilot had sought to replace it. The system is based on a pointing device, the Pod, much like a lightweight TV camera or small conventional followspot, mounted on a tripod, from which the operator can track a performer in real-time and up to 64 automated lights can come along for the ride. TrackPod calculates where, in three dimensions, the operator is pointing and, using laser calibration, gives the lights their directions. He also has control of all the moving luminaire's attributes in the system. While the demo was a prototype and the set-up on their booth was not ideal, the potential of the eventual product could be readily appreciated.

**PC Lights** of Tokyo, Japan, showed the prototype of a sexy diecast magnesium indoor/outdoor washlight, which comes in both fixed and driven versions. The colour-mixing Turbo, which has a sealed optical environment, also offers a variable beam field angle from 4° to 40° and a choice of 575 MSR or MSD or 700W metal halide lamps.

There is not much more to be said about **Vari-Lite's** VL7 spot luminaire, except to say that everyone L+S spoke to was raving about it, particularly the 8:1 zoom and the new colour

mixing system. There was, however, an unexpected surprise in the VL7B which adds full image framing to the other attributes, and the VL6B which, surprisingly, when you consider how compact it is, has been reverse up-graded with zoom optics to deliver from 12° up to 36° field angles. Vari-Lite also launched the long-awaited Virtuoso lighting console, which means that by name, at least, the boys from Dallas have gone from blue collar to white in a single generation - only in the land of opportunity! The big feature of Virtuoso is a fully integrated 3D graphics interface which is promised to be capable of providing live status info, while it can also be used in preview or off-line mode to review and edit cues. These new products are expected to become a reality in the spring of next year.

**Stage Technologies'** John Hastie had a busy night of it re-programming a replacement Nomad stage automation console on his arrival in Phoenix, after a baggage handler wanted to see how many times the demo model would bounce. However, the replacement was brought up to speed and Hastie was able to demonstrate the capabilities of the system which have led to no less than six units being installed at the new Sadlers Wells, as well as other high profile installations at the Royal Opera House and the Grand Princess cruise liner. News on further developments is expected from Stage Technologies early in the new year - watch this space.

**Rosco's** new Image Glass range is a deeply textured collection of standard B-sized glass gobos used primarily to provide an added dimension to steel gobo patterns, and the range of effects that can be produced by varying focus is quite remarkable. The Prismatic range of effects consists of glass gobos with broken fragments of coloured glass fused into the surface. Each style of gobo has a designated colour scheme - forest colours or ocean colours, for example - and again a fine range of effects achievable.

**Altman** were showing the Master Ellipse, a compact and lightweight 70W fixture which offers light output equivalent to a fixture many times larger, and can throw a gobo image over 65ft. Aimed at the architectural and display markets, the Master Ellipse comes in a variety of housing colours and boasts a 9,000-hour lamp life. Also on stand, the Star Par, a die-cast aluminium spot/flood fixture. Offering a rugged yet lightweight alternative to standard Par fixtures, the Star Par uses a 575W tungsten halogen lamp and a high-grade polished aluminium reflector, and has a variety of easily interchangeable lenses.

New York state-based **Lycian Stage Lighting** had the new 1293 X3K long throw followspot on display. This 3kW xenon features a separate slot for diffuser, UV or correction filter, a centre-mounted six-colour reversible 'boomerang' frame for gels and dichroics and dual controls for left- and right-side operation.

The Sapphire 2000 lighting console received its US debut on the **Avolites** stand, along with the

PLASA award-winning Focus Finder (receiving an Honourable Mention from the LDI award judges), which semi-automates the process of updating the positional data of a lamp, relative to pre-set focus, and the Visualiser virtual programming software package. The Sapphire 2000 boasts 2048 channels, control of 400 fixtures, built-in graphics tablet and the 'electronic legending' for memories and palettes, familiar on the Diamond console.

**Artistic Licence** were also the proud recipients of an Honourable Mention from the LDI product award judges for their Micro-Scope 3 DMX test tool. Features include moving lamp test of up to 24 lamp attributes, a personality library covering 192 fixtures and the Mic-Edit facility, which allows custom modification of lamp personalities, presets and set-up features.

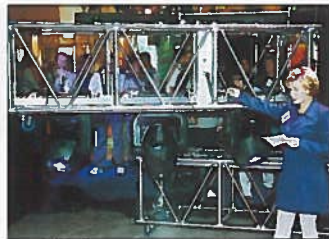
But that wasn't all from Artistic: the Chain Link is a compact motion control console, which can control up to eight motors. Features include simple set-up using pre-defined motor personality library, the ability to accurately position motors without encoder feedback (by measuring the time the motor is in motion and calculating its new position) and optional PC data link for graphic display of motor position and cue preview. Finally, Artistic were showing Grand-Master Flash V2, the upgraded version of their PC-based virtual moving lamp console, which outputs DMX via the DMX-Dongle II - a flashier, faster, sexier version of its now seemingly unattractive predecessor.

**Hardware for Xenon** were showing their new spherical projection system, which uses a 57mm lens to project onto the interior of a sphere. The model being demonstrated at the show was projecting a range of images into a 4.2m diameter sphere, creating a clear image right around the 13m circumference. A graphics interface is used to correct image distortion, and larger lenses are currently in development.

On the **AC Lighting** stand were some new improvements to Cast Lighting's WYSIWYG software, including some impressive rendering facilities, complete with very convincing smoke and haze effect reproduction. As Flying Pig Systems' Nils Thorjussen memorably put it, this is "badass rendering", which seems to capture the essence of the thing. From Flying Pig themselves, AC were showing the new v.3 software for the Wholehog II.

**ADB** were exhibiting for the first time at LDI, and were quite aptly showing a test version of their ISIS (Integrated Software for Intelligent Systems) software and the rather aptly-named Phoenix lighting control consoles. The impressive growth rate experienced by ADB in recent years (20% per year of late) has probably provided the impetus for turning to the North American market for the first time. Mike Musso told us the response to their products from both the US and Canadian markets had been excellent, as many users seem to be experiencing this level of sophistication in lighting control for the first time. The company have also been involved in discussions with





Pictured above, left to right: new from Wybron, the CXI ColorFusion colour-mixing scroller and the ProScenia scrolling scenic projector; Tracey Howell of Artistic Licence is joined on stand by Michael Kennedy of Kennedy & Sons, from Columbia, Missouri; product demonstration at the launch of Tomcat's IT (Intelligent Truss) pre-rig; a view of the award-winning Vari-Lite stand.

operators on the subject of terminology variations, and how North American requirements in this respect could be met by ADB's systems.

Returning to the Phoenix, this range of consoles is aimed at bridging the gap between the company's high-end VISION 10 system and the smaller desks in the range, offering options from 360 to 2048 channels. The Phoenix 2, Phoenix 5 and Phoenix 10 versions all run on the same ISIS platform, and offer the same operating functions, including integrated colour and motion control capabilities - the difference lies in the size of their front panels and their respective control facilities. ADB report that 58 Phoenix systems have been sold since their introduction at PLASA 98.

Nearby the Clay Paky stand, where their electronic systems were hard at work inside CP's well-known range of moving lights, **Pulsar Light of Cambridge** were promoting the new free upgrade to their own Masterpiece 108 control system, which makes the 108 patchable up to 256 channels. Also on show was a preview of the next stage in the process - the Masterpiece 216, which has an attractively restyled front-end which still retains the familiar Masterpiece look. Going into production in 1999, the Masterpiece 216 will be patchable into 512 channels, which should open up new application areas for the system.

**Strand** had the upgraded versions of their 500 series control consoles on display. Incorporating Pentium II 233MHz processors, the powerful new generation of desks offer up to 6,000 channels and 8,192 DMX outputs. The facility for partitioning the main console so that up to five designers can work on different aspects of a show independently, also gives a great degree of flexibility to the user - or users. Also new from Strand were the Quartzcolour range of studio luminaires.

Italian manufacturer **SGM** were teamed up with US distributor **Image Lighting & Sound**, and were showing the new 575W version of their Colour Dynamic effect, the first 100W model of which was shown for the first time at LDI in Las Vegas last year. You may remember these use a colour wheel, a prism and a rotating cylinder packed with lengths of optical fibre, together producing a remarkable pixellated version of more familiar liquid effects. The larger 575W version uses an incredible 70km of optical fibres to fill the cylinder - not a cheap process, but a very interesting effect, and 50 units are apparently bound for a Japanese theme park. Also on show from SGM were the Giotto moving head washlight, and the Studio range of lighting controllers.

Another interesting development first seen last year and picking up an award in the process, was the **Color Kinetics** range of LED-based colour mixing luminaires; this year they were back with the expected developments of the product range. These range from the submersible Water Color fixture to the tiny clusters which can replace MR16 bulbs, to linear fixtures of varying sizes for

architectural applications. This too is an expensive technology, but the price will come down in time, and the major development in the light output of LEDs required to increase the potential applications for the technology is expected to happen in the New Year, with Hewlett Packard allegedly working on an LED that will be 10 times brighter than those currently available.

**Mad Lighting** had some big news to reveal - the official opening of their new US office in Charlotte, North Carolina, which is headed up by Michael Kluger. This is already in operation and holding a stock of Mad's highly successful product range. On show at LDI were Mad's Q range of products - Q-Scan, Q-Star and Q-Colour. 'Q' stands for 'Quiet', as these products incorporate new technology from Mad which allows for completely silent mirror movement. Also on show, the IMP (Image Marketing Projector), version two of which will be available next year.

**Lighting Technology** were sharing a portion of the Mad Lighting stand, and here they showed their latest additions, in the form of the Image Plus Mk 1. This is the first in a new family of image projectors for low voltage fixtures, offering both metal and glass gobo projection together with framing facilities. Fitting onto any James Thomas Par 16 can (Birdie), the unit can also incorporate a new localised dimming control. Also on show from Lighting Technology was the 35W CDM converted Source Four Par, with an 8,000-hour lamp life. As we reported in the news last month, Lighting Technology have also just taken on the role of master distributor for Europe for the Color Kinetics range of products.

**White Light** were showing the new Callisto exterior profile spot from their specialist architectural division, Enliten. Seen earlier in the year at PLASA 98, Callisto uses a 150W metal halide bulb with a 9000-hour lamp life, and is available in a range of beam angles from 10° to 55°. The lantern can take gobos and masks, which, together with the unit's bright, crisp beam, makes the Callisto ideal for logo projection, framing or effects work.

**Wybron's** Proscenia scenic projection unit had undergone something of a redesign since the prototype version was previewed at PLASA in September, but the entry-level scrolling projection system remains fundamentally the same. Proscenia offers four colour scene projection, a scene changer, rotating pattern effects and various lens packages according to design requirements and venue parameters.

Also on the Wybron stand was the company's latest scrolling colour changer - the CXI ColorFusion. This comes in an attractive and durable housing and contains two colour scrolls with graduated frames of cyan, yellow and magenta to create a subtractive colour mixing system. Using a single control channel, the user can select the required colour from 255 pre-sets matching the most popular gels from Rosco, Lee and GAM, via the CXI menu, then select the

corresponding DMX level and the scrolls will mix that colour. By switching to two-channel control, the user can create nearly 100 additional colours.

Television and film effects specialists **CITC** introduced several new products at LDI this year. The Transformer is a fog machine that can utilise either water or oil-based fog fluid. As the latest addition to the Hi-Lo DigiFogger range, it also features Hi/Lo output switch and remote control with cycle timer, and CITC state that it uses 50% less fluid than conventional foggers. Another addition to the family is a water-based version of the Hi-Lo DigiFogger, which has already found favour in opera applications in Portland and Seattle. Hardly surprising that the opera singers don't mind it - the fluid is legally classed as distilled water. Also new, the Little Blizzard SP (sound-proofed) realistic snow effect machine which is aimed at close-up dialogue scenes in TV and film. The Gyrofan is a new DMX-controlled fan for use with fog, haze and snow effects - three channels control X axis, Y axis and fan speed. Finally from CITC, the Jungle Mist system, which generates a fine watery mist, indoor or outdoor, by forcing water through brass nozzles with .008 or .012 inch apertures.

**Gray Interfaces** picked up a well-deserved product award for a protocol converter that kills several problematic birds with one clever stone. The Ultimate DMX converter is able to convert multiplex lighting protocols - users can select from the following input and output protocols: AMX 912, AVAB, Colortran CMX, Kliegl K96, MicroPlex 1 and 2, Electro Controls (a dimmer type ubiquitous in the States) and Strand D54. Configuration is fast and easy via a backlit LED display, and the unit also offers a range of very useful diagnostic functions, plus a cable test mode.

On the **Xenotech-Strong** stand, **Xenotech** were showing the new Chroma Scope, a 20" diameter colour changer for the Britelight 4000 and 7000. The DMX-controlled system works with overlapping rings of concurring blades, fabricated from high quality dichroic-coated borosilicate, in cyan, magenta and yellow. The blades of any of the colours may be introduced into the optical path in groups of four or eight, depending on whether a solid or alternate colour field is required.

**Strong**, meanwhile, were launching the TrussTroupier 1.2, no less than 50 years after the launch of the company's very first Carbon Arc Troupier. Using a 1200W double-ended metal halide lamp, the TrussTroupier features a new lightweight switching power supply, an exterior mounted lamp focus control, a self-cancelling six-colour 'boomerang' magazine and a rear-mounted douser control. The fixed focus unit can be provided with any of three interchangeable lenses for long-, medium- and short-throw applications.

**Special FX Lighting**, who hail from the excitingly-named town of Hurricane, Utah, were



Paul Simson and Peter Simpson of White Light with the new Callisto architectural profile from Enliten.



Xenotech's Richard Hart with the Chromascope, a new colour-changer attachment for the Britelight 4k and 7k.



Andy Graves and Derrick Saunders show the preview version of Pulsar's forthcoming Masterpiece 216 control system.

another company who received an Honourable Mention in the product awards, this time in the architectural category. Their new Dichro•X permanent colour lenses were developed to solve the problem of colour burn-out on architectural and theatrical fixtures. The lenses have high transmission levels, require no maintenance, are available in any colour or combination and offer substantial savings over full dichroic filters.

PCM were also at the show, exhibiting the range of Columbus McKinnon motorised hoists, including the Prostar compact hoist, fresh from picking up a Product Excellence commendation at PLASA 98.

Visitors to the AVAB transtechnik stand were treated to a glimpse of the company's new flagship Solaris console - a totally new product, developed by Transtechnik GmbH and LDDE of Austria. Key features are its modular construction, multiple touchscreens, and the latest version of the company's Safari software. The first of these units has already been sold and installed at the

Volksoper Opera House in Vienna, and a major European broadcaster has also ordered several of the new consoles for their main studios.

David Rose of the UK's Navigator Systems was joined on stand by representatives from Navigator's Orlando and Phoenix offices, helping to demo version 1.3 of the company's popular Hire Track software, which is, as usual, available as a free upgrade to all existing customers. Latest news from Navigator - which may be of interest to larger hire companies - is that a multi-site version of Hire Track is now available.

British Optical are one of the main manufacturers of optical systems and components, including lenses, prisms, mirrors and reflectors. At LDI they had their new range of UV transmitting glass lenses on show, for blacklight applications. The company's full range of standard clear borosilicate fresnel products is now available in UV transmitting versions.

While on the subject of blacklight effects, one of the major exponents was situated nearby -

California-based UV/FX, headed up by Richard Green, were at LDI displaying the dual image scenic techniques which have popped up in the news pages of L+SI in recent months, as well as their full range of ultra violet lighting effects.

UK manufacturer Doughty Engineering were once again displaying their ranges of rigging and suspension systems, and were also once again sharing stand space with Dutch truss manufacturer Prolyte, whose US branch, based in Savannah, Georgia, had also distributed Doughty in US. This year, however, the partnership had a stronger foundation, following the formation of Doughty & Prolyte Inc, a dedicated distribution arm for the two companies' product ranges.

Le Maitre were spicing things up by detonating flash-bangs of pyro on their stand, every hour on the hour. In between times, when the safety cordon was removed, visitors could find Le Maitre's pyrotechnic systems and atmospheric effects including the new Sure Fire and Step Fire pyro controllers, and atmospheric effects including

# TOOLS FOR THE TRADE

**dbx** dynamics processors have graced the racks of live sound professionals for decades. Classics like the **160A** and **166XL** and the **120XP** (Boom Box) have become so familiar that adjustments are made by feel rather than sight, and reliability and sonic quality are taken as given. That's why you'll usually see dbx on any successful engineer's rider.

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From top: • **120XP** Subharmonic Synthesizer • **20 Series EQ** **2231** (pictured), **2215** & **2031** also available • **160A** Compressor • **1046** Stereo Compressor/Gate • **1066** Comp/Lim/Gate • **DDP** Digital Dynamics Processor • **166XL** Comp/Lim/Gate

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the Neutron Star Hazer, which uses a non-water-based fluid that will last for 100 hours from a 2.5 litre tank, and leave no residue.

**Tomcat** introduced their version of the pre-rig truss concept, and made rather a good job of it - that is to say, a good job of IT, or Intelligent Truss. The assembled crowds were treated to a long-awaited unveiling on the morning of day one, and the IT, which usefully has a winch system to allow one person to deploy the rig, attracted a great deal of attention during the show.

**Total Fabrications** and their US operation **Total Structures Inc** were also showing their latest innovations, including the Fold Flat Truss, the award-winning XO truss (constructed from a special aluminium alloy that retains its lustre) and their very own Intelligent Pre-Rig. Total Fabs' 360° followspot chair was also new to LDI.

**James Thomas Engineering (Ltd and Inc)** had their latest additions to their truss range on show, including the 20.5" Fold Flat Supertruss and, for the exhibition market, Squarelite box truss (30.5cm, 12" and 40cm, 15.75") and the Superlite triangular truss (40cm, 15.75"). We'll save the news on both **TMB** and **City Theatrical** for the next issue of L+SI, as we had a unique opportunity to visit the offices of both these companies recently.

Others at the show included **Glantre Engineering**, currently riding the waves again with the Voyager of the Seas cruise liner (see news page 8) and **DHA Lighting**, who reported a very successful trip, if a little dry. From New Zealand, **Selecon** introduced the innovative Pacific Cool Light (see news page 39) to the US market.

In 1999, LDI will decamp to Orlando, always a successful city for the Show, and with all the



**Yves Ruellan of Hardware for Xenon (right) and Alex Lavin from the company's California office with Hardware's new spherical projection system.**

current excitement we can look forward to that. Thereafter, there is a threat that the Show may be moved to October to provide some relief for those who also exhibit at IAAPA, the theme parks expo, which this year started in Dallas the week after LDI: but then one exhibitor's logistical problem is another foreign visitor's bonus, and such a move will certainly not be popular for those from these shores who wish to attend both events.

## LDI Product Awards

Sound Product of the Year:

KF750 loudspeaker, EAW

- Honourable Mention:

Wireworks' TEC256 Multipin Cable Tester

Widget of the Year:

Rite-Lock, Silver State Wire Rope & Rigging

Lighting Tools & Software Product of the Year:

Lightwright3, developed by John McKernon, distributed by City Theatrical

- Honourable Mention:

Focus Finder, Avolites

Micro-Scope 3, Artistic Licence

Rigging and Hardware Product of the Year:

Nysteel Sheave, Protech Theatrical Services

Scenic Effects Product of the Year:

EFX/Plus<sup>2</sup>, City Theatrical

Honourable Mention:

RE2 Variable Beam Fan, Reel FX Inc

Architectural Product of the Year:

CDM lamps, Philips

Entertainment Lighting Product of the Year:

Source Four Zoom, ETC

VL7, Vari-Lite

ESTA Dealers' Choice Awards:

Expendable/Widget Category:

TileMount from Future Light Inc

Equipment Category:

Ultimate DMX Converter, Gray Interfaces

# High End



S Y S T E M S  
L I G H T I N G · W O R L D · W I D E

## Regional Business Development Managers

## Flexible Locations - Competitive Package

High End Systems, Inc. is one of the world's largest manufacturers of intelligent lighting for entertainment, corporate event and architectural applications. Our quality line of products is designed and produced in Austin, Texas and distributed from there throughout the Americas and elsewhere from our regional offices in Europe and Asia. They are marketed in some territories through dealer networks, in others by national distributors and can be seen in upscale concert and theatrical performance, TV and movie production, discotheques, theme parks and elsewhere.

Our continued growth means we are now looking for two Business Development Managers. One will be responsible for a number of European countries and the other will be responsible for the Middle East. Their key objective will be to grow sales by strengthening existing customer relationships and developing new business opportunities throughout their region. The successful candidates will be bright, ambitious sales professionals with a track record of achievement gained in a demanding customer-led environment in a related industry. They will also possess superb motivating, influencing and communication abilities. As well as having a multicultural international outlook and a strategic mindset, they must be commercially astute and will have excellent key account management skills. Naturally they must be in a position to travel extensively within their regions, and the ability to speak two or more languages would be extremely beneficial.

Interested applicants should respond by e-mail, fax or letter only. Applications, including a CV with salary history, should be sent to:

Tim Oake

General Manager, EMEA Operations

High End Systems, Inc.

Elandstraat 30

1016 SG Amsterdam

The Netherlands

fax: +31 20 423 5945

e-mail: tim\_oake@highend.com

# CLASSIFIED

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Suitable applicants must be willing to learn and to explore new ways of achieving satisfactory solutions. Computer skills, especially CAD, are desirable. Relevant training will be available.

Knowledge of electronic design advantageous.

Application in writing with full CV to:

Mr. L. A. Pieters

Managing Director

Ampetronic Ltd. Whitehouse Wharf

Millgate, Newark, Notts. NG24 4TY

Tel. 01636 610062 Fax. 01636 610063

## RF SERVICE ENGINEER

SENNHEISER UK Ltd is a market leader in the supply of audio equipment to the professional and consumer markets. Part of an International Group of companies, we currently have a vacancy for an RF Service Engineer.

The vacancy will suit someone who works well under pressure, enjoys customer contact and thrives on attention to detail and customer service. The job involves test, repair to component level, rebuild and realignment of the company's RF products at our premises in High Wycombe and occasional on site visits and installation. You should be qualified to HNC or equivalent with good RF knowledge.

There will be considerable contact with customers and our external sales team, so a good telephone manner is essential. There is an excellent salary, plus extra benefits after a qualifying period.

If you feel this job is for you, please send your CV, stating current salary, for the attention of Ian Smale, Service Manager, at the address shown below, or if you wish to fax your CV on our private fax line, the number is 01494 551521. Alternatively our e-mail address is [info@sennheiser.co.uk](mailto:info@sennheiser.co.uk).

Sennheiser UK Ltd, 3 Century Point, Halifax Road,  
Cressex Business Park, High Wycombe, Bucks HP12 3SL.



## ETC Europe Recruits for 1999

### SALES

**Territorial Sales Support:** (preferable start January 1999) An experienced sales professional from the entertainment lighting industry is required to develop dealer sales in targeted territories and provide general Sales support. The position will be office based with occasional travelling to tradeshow and customer events.

Knowledge of distribution networks throughout Europe would be beneficial, as would fluency in a major European language.

### PROJECTS

**In order to expand its Project and Design capabilities ETC is looking for recruits for the following positions:**

**Projects Administrator:** (preferable start January 1999) To develop and organise systems for project scheduling, process management and to maintain project documentation. Good organisational ability required. Fluency in a major European language would be an advantage.

**Project Quotations:** (preferable start January 1999) To interpret project specifications and generate quotations with supporting drawings and documentation. Previous project and/or lighting product knowledge required. Commercial experience would be an advantage.

**Technical Service Engineer:** (to start April 1999) An experienced electronics engineer to carry out repairs in the factory and in the field and to provide customer telephone support. Prior knowledge of ETC or similar products required. Full training will be provided. Some ability in a major European language would be an advantage.

**Projects Drafting:** (to start July 1999) An experienced draftsman to produce project drawings and technical documents. Good knowledge of CAD software required. Full training will be provided.

Interested applicants should write to Valerie Price at : ETC Europe, Unit 5 Victoria Industrial Estate,  
Victoria Road, London W3 6UU. Or fax applications to 0181 896 3000.

## ARBITER PRO AUDIO

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Working with the most prestigious brands in the business you would ideally be Midlands or Northern based, ready to receive the benefits and security of a PLC and looking to become part of a dynamic team.

*Applications in writing please, enclosing CV and current salary details to:*

**Mr Dave Karlsen**  
**Sales and Marketing Manager**  
**Arbiter Pro Audio**



We are currently looking to fill the following positions

#### HIRE MANAGER

The position involves the handling of hire enquiries, supervision and assistance in the maintenance of professional lighting and rigging equipment and the training of staff. Applicants should have a good knowledge of lighting equipment and electronic control, and possession of an NICEIC approved qualification would be an advantage.

#### OPERATIONS MANAGER

The position will include liaising with clients, organising equipment lists, crew, transport and liaising with the hire department. A strong knowledge of the industry and an electrical and mechanical background would be advantageous.

We are also constantly looking for freelance designers and riggers.

Please post your CV to:

Ian Barwick, 26 Abbey Business Centre, Ingate Place,  
London, SW8 3NS or E-mail to: [eventlight@aol.com](mailto:eventlight@aol.com)

# DISNEY CRUISE LINE

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Please fax your resume to DCL, HR Box 5, (USA) 407-566-7575

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# Key Opportunities to see in

The Millennium Experience in the year 2000 will be the most exciting event in the world.

Inside the spectacular Dome at Greenwich, London, the Experience will be open every day with exhibits and performances that will entertain, inform and inspire.

This is your chance to play a key part in this unforgettable event.

NMEC (the New Millennium Experience Company) seeks the following staff to join its growing Production Department (based at the Dome) as soon as possible. Should you feel that none of these posts are right for you, you are encouraged to send in your CV and a brief covering letter to the Production and Operations Staff File, as both departments will be seeking further staff in the near future.

## Lighting Designers & Sound Designers

Eager for a challenging opportunity to design the lighting and the sound for the exhibit zones in the Dome, and potentially for other elements of the Millennium Experience. Supported by our in house lighting and sound departments, you will work with our exhibit zone design teams.

## Project Manager – Exhibit Zones (5 positions)

Each Project Manager will be responsible for 2 or 3 zones, managing the planning for and overseeing the actual installation of all elements of the exhibit zones: sets, lighting, sound, screens and other AV, electrical distro and fire systems, floor finishes, etc. You will co-ordinate the scheduling, access and other logistics for your zones, and liaise with the exhibit zone design teams, content editors, construction team, etc. You will ensure that everything you need for your zones is procured and installed in line with the conceptual design with due regard for Health and Safety and other relevant regulations, the budget and the timescale. You will have substantial experience in technical production of theatre, exhibitions or events and of delivering complex technical solutions in tight time-scales and to budget. Experience of permanent installations and a detailed understanding of set fabrication will be an advantage.

## Deputy Head of Lighting

To assist the Head of Lighting in procuring and installing all lighting inside the Dome around the Greenwich site, and giving guidance to the exhibit zone lighting designers. This post is supervisory initially, and is intended to develop into the position of Head of Lighting Maintenance during the operational year 2000. Strong hands-on knowledge is essential together with experience of theatre/exhibition lighting and architectural lighting. You will have 2 years' hands-on experience of maintenance of large-scale lighting installations, ideally including bench tech knowledge of automated lighting.

## Head of Broadcast Sound

To work with the Head of Sound on all broadcast matters, advising on and supervising the procurement and installation of equipment across the Dome site, and managing the use of radio mic frequencies. This is a largely supervisory role, but hands-on work will be required, as will extensive liaison with broadcasters and contractors. Excellent knowledge of broadcast sound, experience of radio system installation, ISDN and radio mic frequency is required.

## Sound Cabling Supervisor

To manage the cabling for all sound systems in the Dome, assisting the team of sound designers with all aspects of installation in all public and performance areas, designing and costing racks, panel work, cable runs, and other infrastructure as required. A high level of capability as a first class wireperson and experience of managing cable installation for venue entertainment systems is required.

## Senior Sound Engineer (2 positions)

Although mainly supervisory positions, hands-on work will be required in assisting the Head of Sound in advising and supervising the exhibit zone sound designers with equipment procurement and installation. During the operational year 2000, the post will co-manage the site for all sound and sound crew requirements. Excellent knowledge of live sound and installation work in theatre or exhibition environments is required, with experience of DSP or digital audio equipment.

## Head of Electrical Distribution

To plan and manage the installation of all electrical distribution, cabling and cable ways, etc. for the exhibit zones, central show, and other elements of the Millennium Experience content. You will work with the exhibit zone project managers and design teams, sound, lighting, and AV staff, and liaise extensively with the construction team. You will have relevant qualifications and substantial experience of permanent electrical installations in an entertainment/exhibition industry context; experience of procurement and managing contractors, and maintenance of installations is also sought.

## Chief Technician

To plan for, recruit, and manage the central crew of a minimum of 40 people who will run the central show, exhibit zones, 'Baby Dome' and other performance spaces within the Dome site both during the installation period in 1999 and during the operational year 2000. You will be fair and diplomatic, have advanced knowledge of theatrical automation, rigging and scenic elements, and a proven track record of efficient budget and crew management on large projects/venues.

## Technical Production Manager – Opening Ceremony

To co-ordinate all technical and production aspects of the Dome Opening Ceremony, ensuring that all arrangements including rehearsals, staffing, sets, and scheduling are fully integrated with the Dome Central Show. The Production Manager will need exceptional diplomatic skills and have a proven track record of large-scale production management, with experience of large-scale community performances being an advantage.

# the Millennium

## **Project Co-ordinator – Opening Ceremony**

A once in a lifetime opportunity to co-ordinate arrangements for the Dome Opening Ceremony, liaising with all the parties responsible for protocol, front of house, transport, media, and production. Our Co-ordinator will be the central point of contact and ensure total continuity in the delivery of a multi-faceted programme of activities on New Year's Eve 1999. You will need experience of large scale project co-ordination, along with exceptional diplomatic skills, experience of dealing at the highest level, attention to detail, and be very well organised.

## **Event Co-ordinator**

An exciting opportunity to join the dedicated events team on the Greenwich site to develop and manage the Live Events programme in and around the Dome for the year 2000. The post-holder should have experience in arts/festival administration, ideally to include contract administration and programming, with a wide ranging enthusiasm for street entertainment to opera and equal enthusiasm for and experience of working with community and professional performers in informal settings.

## **Dome Diary Scheduling Co-ordinator**

To centrally co-ordinate the scheduling of all events, special visits and happenings at the Dome site through 1999 and the operational year 2000, utilising specialist computerised scheduling software. Working jointly for the Production and Operations departments, you will need a good understanding of the running of large scale venues/events, and have a strong aptitude for IT; you will be entering all events and scheduled works and will be helping to specify the precise user needs and computer system needs to support the scheduling operation. You will be diplomatic, pay great attention to detail, be flexible and reliable within a fast moving creative environment.

## **Prop Costume Manager**

To oversee the making of all Prop Costumes and assist the Head of Costume prior to and during the operational year 2000, working closely with the Costume Designers and contractors in all matters relating to the construction of Prop Costumes and overseeing their safe handling during performance. You will need excellent organisational and communication skills with proven costume/prop budget management experience.

## **Administrative Assistant to the Head of Costume**

To assist in all costume matters relating to the central show and all Dome costume requirements prior to and throughout the operational year, including the administration of the departmental budget, the tendering and procurement process and the recruitment, co-ordination and management of further departmental staff. You will have a proven track record of efficient costume budget management, with excellent organisational and communication skills; experience of tendering and procurement will be an advantage.

## **Assistant to the Show Administration Department – Central Show**

To provide efficient and effective assistance to the Head of Show Administration in all duties relating to setting up and running the Central Show cast and Dome stage management teams and visiting performers, with particular responsibility for scheduling, performance, team support and industry/treatment administration. You will have a minimum of one year's relevant work experience in which interpersonal skills were essential and excellent organisation and communication skills, with IT literacy and knowledge of Arts Administration an advantage.

## **Production Assistant – Exhibitions (2 positions)**

Providing accurate, timely and effective general administrative support to the exhibit zones teams in their practical realisation of the Millennium Experience content, plus specific projects for the Production Director. You will be an intelligent written and verbal communicator; have first class organisational skills, be IT literate, and comfortable working with technical and creative personnel in a fast moving creative environment.

## **Production Assistant – Central Show**

To provide accurate, timely and effective administrative support to the central show production team. You will need at least 18 months' relevant office experience in a fast moving creative environment, with excellent organisation and communication skills, written and verbal. Technical production (theatre/events) knowledge an advantage.

.....  
All posts are fixed term contracts running to at least January 2000, many running to January 2001. The closing date for all applications is 8 Jan 99.

Outline Job Descriptions are available for all posts by faxing 0181 293 8745 stating which Job Description you wish to see.

Please send a detailed CV and brief covering letter, including salary and notice period for your current employment, to Gary George, Human Resources Dept., New Millennium Experience Company, 110 Buckingham Palace Road, London SW1W 9SB.



## STAGE LIGHTING DESIGN

**Richard Pilbrow**

Set to become the new 'bible' of stage lighting, this comprehensive book is illustrated on every page by one of the most respected lighting designers in the world. The book covers Design: the basic principles. History: a brief survey of the historical development of stage lighting. Life: interviews with 14 other lighting designers, plus notes on Pilbrow's own career. Mechanics: a vast section dealing with technical data today's designer will need.

Nick Hern Books • ISBN 1 85459 273 4 • 1997 • 488pp • h'back

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### A Guide for the Entertainment Industry

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This book is a comprehensive guide to the basic theory and practice of lighting. Formerly 'Lighting by Design', this book has been revised to include the latest advances in lighting technology, additional information on lighting theory, up-to-date information on European safety legislation and greater detail on the control of light.

Focal Press • ISBN 0 240 51449 1 • 1997 • 480pp • paperback

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Newnes • ISBN 0 7508 2001 3 • 1994 • 323pp • hardback

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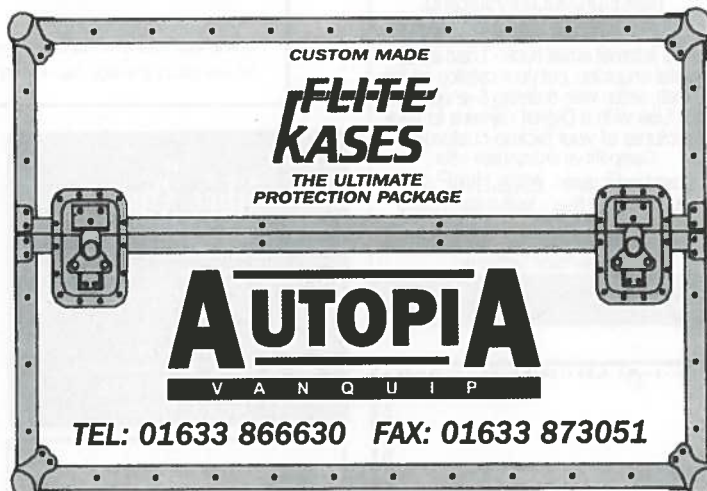
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# L+SI's REVIEW OF '98

L+SI began the year, rightly enough, with an editorial leader on what 1998 looked set to bring to the industry. The New Year promised a batch of new West End productions (*Saturday Night Fever*, *Whistle Down The Wind*, *Rent* and *Showboat* among them), the Rolling Stones' Bridges to Babylon tour was set to arrive on Britannia's shores (or so it was thought at the time) and then, of course, there was the prospect of the Spice Girls' (all five of them!) first tour.

Top topic on the gossip front at the time, however, was the uncertain spectre of the Millennium Dome, which was rising slowly from the polluted Greenwich mud to face a future of either unprecedented glory or unbridled ridicule. Most people's money in January 1998 seemed to be on the latter.

News that same month also included the hangover of a controversial row which had first surfaced at the PLASA Show the previous September. Rumours and allegations of possible creative accounting against Danish lighting giant Martin Professional were still brewing. Tony Gottelier noted the latest developments in his *No Comment* column.

ETC were announcing changes in their European hierarchy, with the departure of MD-of-two-years Bill Gallinghouse to the welcoming arms of the Production Resource Group (PRG) Lighting Division in New York State, while none other than Fred Foster himself was due to arrive in London to personally take over the helm of Europe. And we hadn't heard the last of PRG for 1998 . . .

The Martin Professional controversy continued to hit the headlines in February, with news of senior management changes in Denmark, including company founder Peter Johansen, who stepped down as MD. A step-down of a gentler nature was reported with the decision of Roscolab's European vice-president Michael Hall to take on a part-time consultancy role, after 43 years in the industry.

Vari-Lite International were beginning to set up their VLPS (Vari-Lite Production Services) network, with the acquisition of VLB and EML, the Belgian lighting and sound equipment rental companies. PLASA's big news for March was the appointment of Matthew Griffiths as its new managing director. Outgoing - at least for a while - was SIB in Rimini, bowing out until 2000 on its new biennial basis, while April

L+SI said goodbye to a number of industry faces this year . . .

Richard Harris (Metro Audio)

Melia Peavey (Peavey Electronics)

Peter Sarner (Sarner International)

Ian Sharpe (Ramsa)

Richard Vickers (Kelsey Acoustics)

Julian Winter (Light & Sound Design)

Michael Samuelson (Michael Samuelsons)

Gary Whittington (High End Systems)

Freddie Young (film cameraman)

brought PLASA Presents Light & Sound Shanghai, PLASA and P&O Events' first - and very successful - foray into the China market. Another show switching to a biennial basis was Australia's EnTech, which ran in Sydney in April.

In the first of many high-profile acquisitions during 1998, L+SI reported in May that TOA Corporation of Japan had bought BBM Electronics, manufacturer of the Trantec range of radio microphones. On the touring front, the Spice Girls were now well and truly out on the road, and all indications were that they were making a damn good show of it. Speculation about the Millennium Dome Show increased even further with the announcement that Patrick Woodroffe was to collaborate with Mark Fisher and Peter Gabriel on the Dome's centrepiece extravaganza. The news came after the Stones' cancelled the UK fixtures of their Bridges to Babylon tour (for which Woodroffe was, of course, LD). The Stones blamed Labour's budget, as changes in tax law would have cost them millions, leaving them with . . . well, millions.

More acquisitions hit the headlines in July, with the announcement that Production Arts and Light & Sound Design (LSD) had been purchased by the growing presence of PRG. L+SI's Tony Gottelier voiced doubts about the desirability of such a super-group in his *No Comment* column: there was more to come.

Other corporate developments included the acquisition by Mackie Designs Inc of Italian loudspeaker manufacturer RCF Spa and, in the UK, the buy-out at Turbosound, which saw an

investment group of current and ex-Turbo employees, plus two of the company's distributors, buy the company from the Harman Pro Group.

Meanwhile, the PRG saga continued in the pages of L+SI, with the company's response to Tony Gottelier's column. In Steve Terry's letter to the editor, he commented that "there is no boardroom full of 'big business' executives from outside our industry running the show. With few exceptions, the people running PRG have come from the trenches of the entertainment industry."

On this side of the pond, TeleCast Communications Ltd acquired Blitz and TP Sound from Caribiner International, resulting in the creation of possibly the largest one-stop supplier of AV systems to the media, broadcasting and business communications markets in the UK.

In September, the team from L+SI, along with the rest of the industry, decamped to Earls Court for the 21st anniversary PLASA Show, which proved to be the most successful to date.

October brought the surprise news that Vari-Lite had sold their architectural lighting line - Irideon - to ETC, while VLPS expanded again, this time with the acquisition of Vari-Lite France. Another surprise came when Bruno Wayte, for so long associated with JBL Professional loudspeakers, made the move to RCF (UK).

Surprises in the lighting world also followed in November with the departure of co-founder Richard Belliveau from High End Systems. He exited the company management due to increasing differences in company philosophy. Tony Gottelier and PRG finally got to grips with each other when L+SI sent TG to New York for an exclusive interview with Jere Harris, the results of which appeared in this month.

December brought more revelations - Ken Sewell is set to leave Pulsar to concentrate on his internet consultancy business, whilst Australian lighting control manufacturer LSC Lighting entered into voluntary administration. But we can close 1998 on the fitting theme of peace on earth and goodwill to all men, with the news that those two battling Texan lighting giants - High End Systems and Vari-Lite - have reached a settlement over their patent dispute, which had been festering for more than three years. Merry Christmas.

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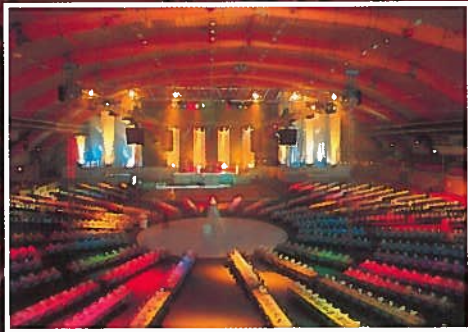
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