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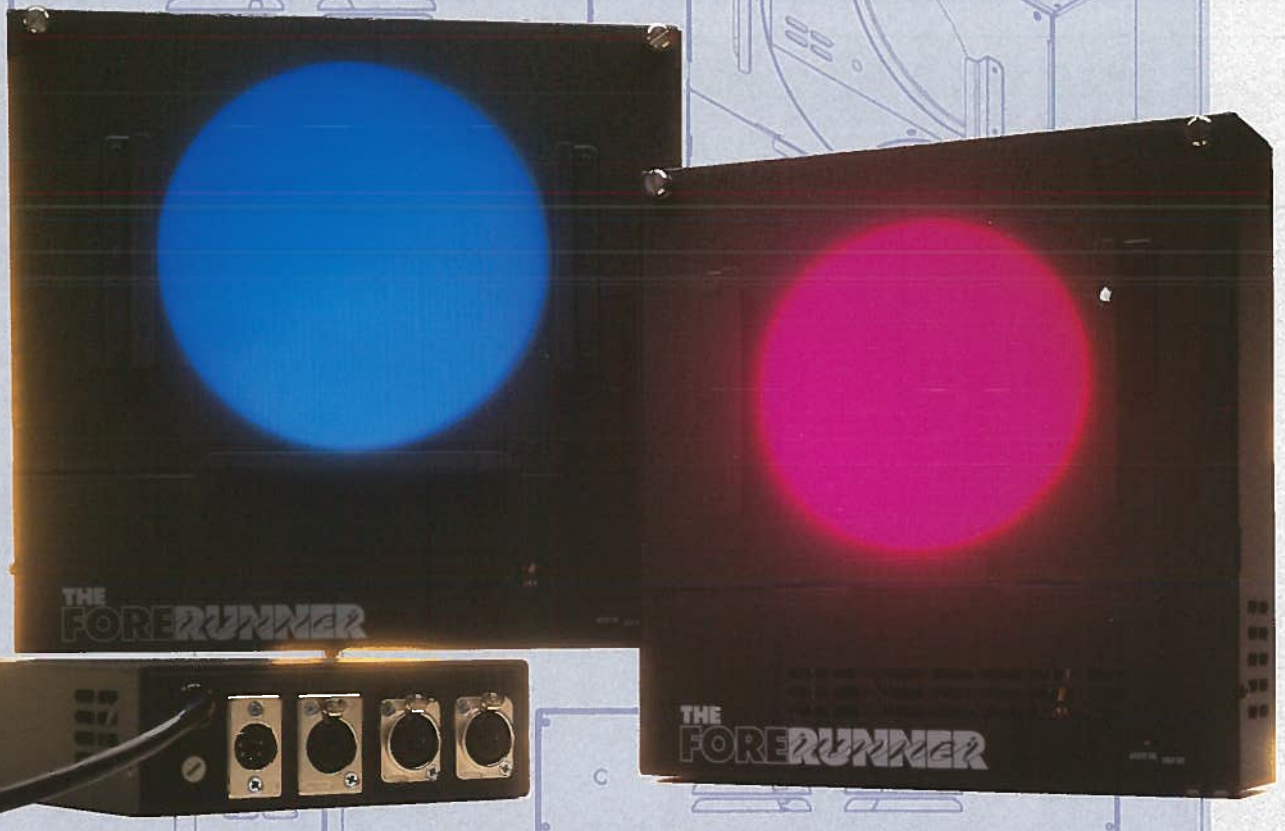
- Night Moves at SIB, Rimini
- Sixth Sense: Hong Kong's Major Player in the Marketing Mix
- Virtual Sound at the Anvil, Basingstoke
- On Tour with Jamiroquai and The Monkees
- ABTT Show: Meeting of Like Minds
- Industrial Landscapes at Tyseley (UK) and Landschaftspark (Germany)

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



LIGHTING+ SOUND *International*

published monthly by the Professional Lighting and Sound Association
© Copyright Professional Lighting and Sound Association ISSN 0268-7429

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Published from the PLASA Office: 7 Highlight House, St Leonards Road, Eastbourne, East Sussex BN21 3UH England
Telephone: (01323) 642639 Fax: (01323) 646905 Internet: <http://www.plasa.org.uk/plasa/> E-mail: info@plasa.org.uk

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The magazine is available on annual subscription

UK £50.00 Europe/rest of world £65.00 (US \$100.00) Airmail £90.00 (US \$135.00) Single copy £3.50 plus postage

Editorial Advisors: Peter Brooks, Wyatt Enever, Mike Gerrish, Derek Gilbert, David Hopkins, Matthew Griffiths, John Lethbridge, Ian de le Vingne, Iain Price-Smith, Neil Rice.

Lighting + Sound International is published monthly for \$90.00 per year by The Professional Lighting and Sound Association, 7 Highlight House, St Leonards Road, Eastbourne, East Sussex BN21 3UH. Second class postage paid at Rahway, N.J. Postmaster: Send USA address corrections to Lighting & Sound International, c/o Mercury Airfreight International Inc, 2323 Randolph Avenue, Avenel, New Jersey N.J. 07001



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PLASA Looks to Shanghai as Centre for Proposed Chinese Exhibition in 98

Enquiries from PLASA members about exhibitions in Asia and particularly China, has led PLASA to look at the possibility of holding an exhibition in China. Following consultation with potential exhibitors, PLASA has liaised with show organisers P&O Events on the best way forward. The focus of this initiative is China's new Intex trading centre in Shanghai, a city which is likely to gain further dominance following the return of Hong Kong to Chinese rule this year.

The aim is to offer PLASA members the opportunity to increase trade in this vast and growing market. In an effort to provide both financial and organisational assistance, PLASA has bid for major funding through the government's new Sector Challenge scheme. If this bid proves successful, finances will be available across a three year period and will include stand and travel grants, equipment transportation and service of interpreters, all under PLASA's control.

The potential for the phenomenal growth of the Chinese market in recent years cannot be better illustrated than by the example offered by Shanghai itself. With a population of 16 million, the city boasts an incredible 1,438 nightclubs, 88 theatres, 1,267 hotels, 5,148 large restaurants, 77 conference venues and 89 professional film



The Intex Shanghai exhibition centre.

production studios within its boundaries. On top of this, there are currently a further 15,000 building projects under way.

In the UK, plans are well advanced for the PLASA Show at Earls Court in September (Sunday 7th to Wednesday 10th). Whilst the UK visitor audience continues to show steady growth, the international audience has increased by a dramatic 27% each year over the last four years. This figure is matched by an increasing number of international exhibitors and it is anticipated that well over 400 products will be launched at PLASA 1997. There have also been moves to expand the Specialist Sound Sector, an area of the show

developed as a direct result of the Sound and Communications Industry Federation's merger with PLASA in 1995. Also incorporated on the Top Deck will be a live stage for workshop seminars, a sponsored theme bar and an Italian speciality cafe. In addition, there will also be a dedicated area for specialist audio-visual companies.

For further details contact P&O Events in London on 0171-370 8229.

Rank Roll On

Rank Group will create 3,000 jobs in the UK this year as the company continues to expand its diverse leisure interests, ranging from the Odeon cinema chain to the Hard Rock Cafe. The largest new developments include a £25 million entertainment complex in Southampton, complete with a multiplex cinema, bars, nightclubs and a Grosvenor casino. Rank is also opening a £100 million Oasis Forest Holiday Village in Penrith, Cumbria.

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Showlight Countdown

It is now just a matter of weeks before Showlight 97, the international conference on lighting, opens its doors at the Flemish Opera House in Ghent on April 28th. As an event, Showlight is relatively unique in industry terms, as it only takes place once in every four years. It also has other claims to make, being one of the few forums in which over 300 people come together to spend three days discussing the art of lighting.

One of the key attractions of the papers programme is its diversity, with contributions drawn from all sectors of the industry. Keynotes speakers include Jim Tetlow, an award-winning American lighting designer with over 20 years' experience lighting for theatre, television and architecture; Rick Fisher, a leading UK drama, opera and dance lighting designer, best known for his work on the award-winning 'An Inspector Calls' in London's West End; Walter Lassally, BSC, a Director of Photography with wide ranging credits for documentaries and feature films; Harry Hollands, a lighting designer and architect for Philips, responsible for the spectacular relighting of the Pyramids at Giza last year.

The event also showcases lighting equipment manufacturers and service companies, and will be a strong attraction for delegates who will see some of the most stimulating ideas in the industry from over 32 international manufacturers and distributors. Delegates will also have an opportunity to experience traditional Flemish hospitality and there are visits planned to VTS Studios and the historic Vooruit theatre.

To secure your place at the conference call 44 (1323) 642639 for registration details.

DeSisti and ETC



An interesting sidenote to the festivities surrounding the celebration of DeSisti's 15th anniversary (see main report, page 36) was the presence of a selection of the latest ETC dimming and control equipment, set up in the DeSisti Lighting showroom. ETC are now offering an auxiliary wing to their European Sensor Dimmer Rack, which allows use of a wide range of standard DIN circuit breaker and RCD options, as well as custom switchgear and accessories.

Present at the event was Bill Gallinghouse (pictured above with Mario De Sisti), MD of ETC Europe. Does this portend a major worldwide alliance between the American dimming company and Europe's popular studio lighting brand? "Not really," explains Gallinghouse. "ETC and DeSisti work through common distributors in many parts of the world, and, in such situations, it makes sense to offer a combined package. Such collaborations have already proved effective for several studio projects in South East Asia and Europe, and we're anticipating more of the same, particularly in Latin America and the Middle East."

New Structure for Structural Company

In preparation for its quarter century next year, Edwin Shirley have just completed a major restructuring. In February, Edwin Shirley Stages (ESS) and Edwin Shirley Trucking (EST) became wholly-owned subsidiaries of Edwin Shirley Holdings. At EST this has seen Del Roll and Ollie Kite confirmed in their role as directors, while at ESS, Tim Norman is joined by new directors Olly Watts and Jeff Burke. Founding directors Roy Lamb and Edwin Shirley have relinquished their shares in the business electing to direct their energies into new activities, the latter to his studio enterprise at Three Mills, and Lamb to concentrate on his production work in the US.



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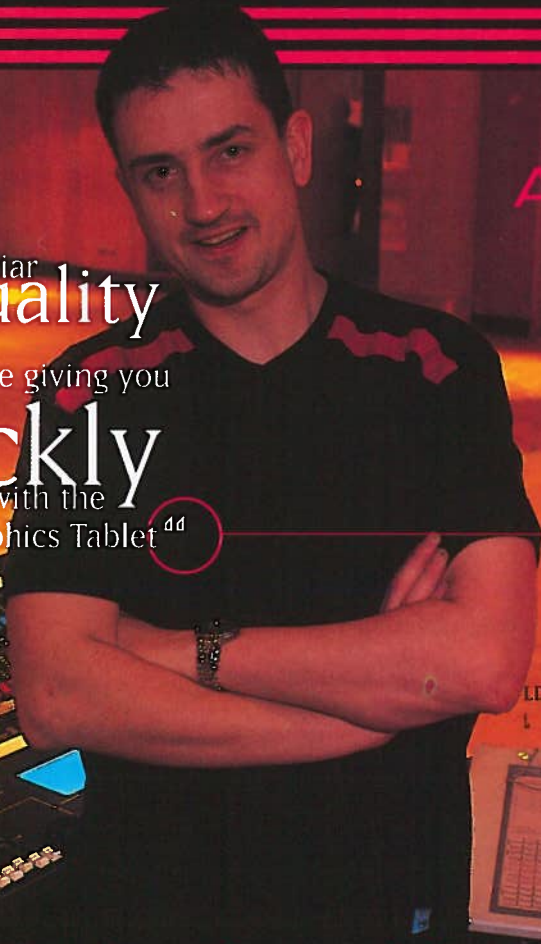
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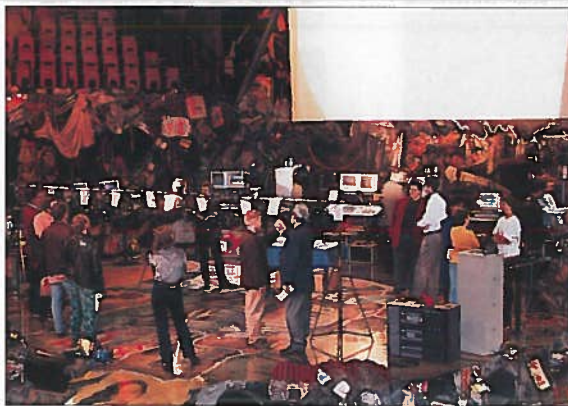


ETC Washes Whiter

At the recent M&M Open Day in London in early March, over 100 people had a chance to try some of the key products on the market. Amidst the lighting and scenery of 'Cats' at the New London Theatre, lighting designers put ETC's Source Four range of fixtures to the test against a bank of other theatre lights whilst chief electricians with the prospect of Lottery money to spend checked out dimming racks and control desks.

The event was so successful that M&M has linked up with its Master Dealer Futurist Light and Sound to arrange a similar event in the North of England. Visitors will be able to see and use the new Source Four jr as well as all the other new products from ETC, including the Obsession ML control console, Sensor CE dimming and Express consoles, the Source Four and Source FourPAR fixtures, plus the new 8" Pro Rainbow Colour Changer.

The M&M/Futurist Open Day is being held at the Grand Theatre in Leeds on April 23rd. For full details contact Frank Fallows at Futurist on (01924) 468183 or Nigel Sadler at M&M on 0171-284 2504.



Wildfire Pair Form UV/FX Company

Wildfire president Richard Green and creative director Kent Mathieu have left the LA-based effects lighting company to start UV/FX Scenic Productions. The new company will specialise in creative development, design and scenic applications for entertainment venues worldwide. UV/FX Scenic Productions is located in California, USA, and can be contacted on telephone +1 310 392 6817.

New Laser Association Addresses Safety Issues

Several major laser display companies have been galvanised into action following concern generated by both the introduction of the new Health & Safety guidelines HS(G)95 and the HSE's deregulation policy whereby it is now the responsibility of the user to operate the equipment to identifiable safety standards.

At a meeting held at the National Radiation Protection Board (NRPB), concerns were voiced for those organisations who have little regard to the operational safety of display equipment and who demonstrate no knowledge of current industrial procedures and relevant MPE levels. As is well known, laser display equipment is potentially very dangerous and the risk of an accident caused by an inexperienced operator is very high. In order to safeguard operators and the general public from potential injuries a new laser display association - the British Entertainment Laser Association (BELA) - has been formed.

The association plans to work with other relevant industry bodies to develop a working code of practice that minimises the risk of injury and also provide a helpline to advise on safety related issues. Geoff Jones of Laser Studio, the new chairman of the association, told L+SI: "The association hopes to introduce initially B-TEC or, subsequently, NVQ qualifications for operators in order to create a flat playing field with the responsibility for system maintenance and safety policy resting firmly with the person who operates the system."

Other representatives on the committee include Chris Matthews of Laser Creations, Steve Harvey of Laser Magic, Tim Fothergill of Laser Grafix, Keith Flunder of LaserHire, George McDuff of Chameleon Technology, Steve Hitchin of the Definitive Laser Company, Paul Tozer of Lasermet, Ram Malocca of Kudos Ion, David Jones of Spectra Physics and Mark Brown of Laser Grafix.

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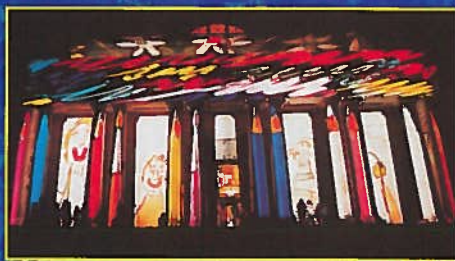
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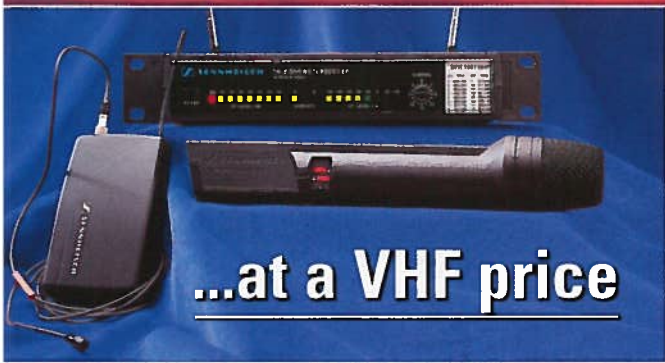
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Clay Paky on Tour with Céline Dion



Pictured above is Céline Dion performing during her recent European tour. Key lighting equipment used on the tour includes 12 Clay Paky HPes, 24 Super Scan Zooms and 12 Polycolors, along with a top of the range Clay Paky colour changer. Lighting designer Yves Aucoin used the HPes to create a tableau of kaleidoscopic images which he projected onto the white backdrop.

London Office for Electrosonic

Electrosonic are setting up a central London showroom at the Business Design Centre in Islington, to highlight video displays and lighting control equipment specifically aimed at the retail markets. The opening of the showroom was designed to coincide with the start of the International Display Week (IDW) exhibition. Electrosonic will be permanently anchored at Unit 301 where showpiece products seen in application will include the award-winning 2xVIEW.

Beast of a Rig

As the performance and event season leaves the January and February blues behind, things have been getting frenetic at Vertigo Rigging. The company's theatre work includes the installation of new overhead and side LX bars at The Soho Theatre Company in Dean Street in addition to the design and installation of a customised front-of-house LX bridge at The Old Vic for the Sir Peter Hall Theatre Company, who are moving in for their 40-week residency.

The Beauty And The Beast installation continues at The Dominion, for which Vertigo are exclusive rigging contractors. The requirements for this show are substantial and demanding, and the brief from producers Disney was specific about all rigging being as near-invisible as possible. This has been put to the test in building a 100ft lighting bridge, requested by Mike Odam and Gerry Amies, which spans the entire width of the auditorium!

The production sound department needed two 7.8 metre sound columns to be built either side of the pros arch to take speaker stacks - of approximately one ton each. The speaker clusters on this boom are attached via brackets specially designed by Vertigo which allow millimetre perfect adjustment in height, pitch and yaw.

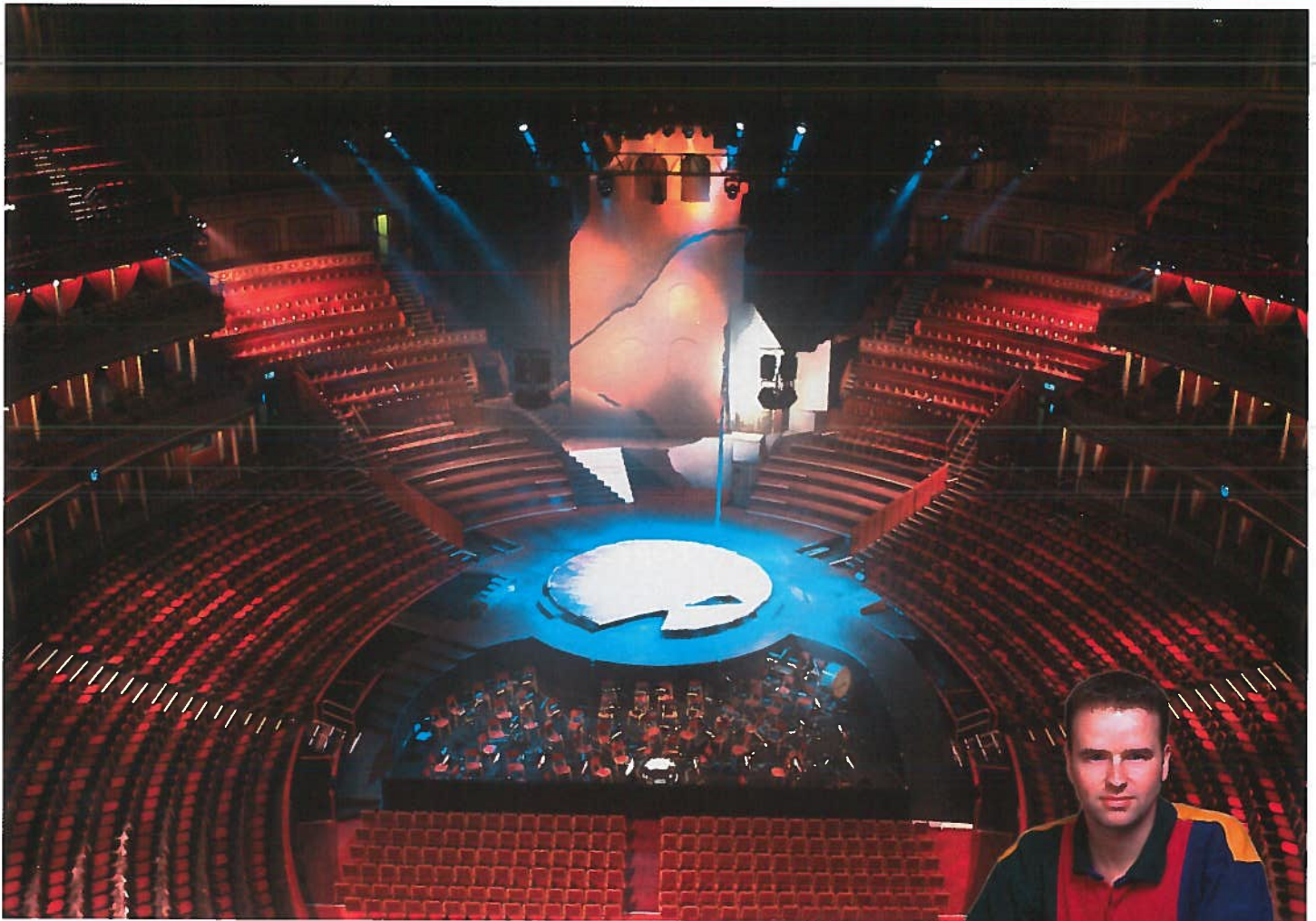
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A £6million investment has gone into the Pepsi IMAX Cinema, part of the Trocadero complex in London, to provide it with the most advanced cinema system in Europe - 'Maximum Image', better known as IMAX - which uses the largest 15/70 film frame available. The Pepsi IMAX Cinema will be the first in Europe to feature 3D format films using IMAX PSE (Personal Sound Environment)



electronic headsets to combine striking images with surround sound for a fully interactive show.

PopMart Heads Major PSL Tour Programme

Presentation Services Ltd have won the contracts to provide full video support and slide projection on a number of major international tours this year, most notably the current Who Quadrophenia and upcoming U2 PopMart extravaganzas. PSL secured their position as video supplier for The Who's tour following a demonstration of Barco 9100s to the band and management while they were on tour last year. Crew chief Stuart Heaney will be the projectionist and Craig Tinetti will direct the show, switching between four Sony D30 digital cameras and Dataton-controlled CRV disc players.

The trans-global U2 PopMart tour is due to commence its 14-month run in Las Vegas. PSL won the contract to supply all the video equipment after demo'ing the kit to tour video director Monica Caston. PSL Inc's tour engineer Dave Neugebauer, assisted by John Huntington, has handled the build of this custom-designed system. The core system includes the switching of six Ikegami HL59WTB (16:9 - 4:3) cameras through a fully-loaded Grass Valley 250, as well as multiple levels of Magic DaVE and Abacus DEvious DVE.

PSA Initiate Pop Code Review

Following the recent annual conference of the Production Services Association (PSA), members of the council held discussions with the Health & Safety Executive (HSE) concerning the revision of the current 'Guide to Health Safety and Welfare at Pop Concerts and Similar Events', first published in 1993. This move takes into account legislative changes, both at national and European level, as well as technological developments in the live event industry since 1993.

Over the next few months departments from the HSE and the Home Office are to examine various 'policy' and 'legislative' aspects of the current document with a view to bringing it up to date. The PSA will then contact other industry associations and interested parties to determine a co-ordinated industry response. Working parties to be formed by the end of June, consisting of industry representatives and HSE nominees, will examine relevant sections of the guide. With the review process scheduled to be complete by the end of November, it is hoped that publication of a revised guidance document will be possible by spring 1998.

Anybody in the industry who wishes to register their interest in participating in the review should contact Keith Ferguson, PSA, Unit 7, 193 Garth Road, Morden, Surrey SM4 4LZ, telephone 0181-335 3323.

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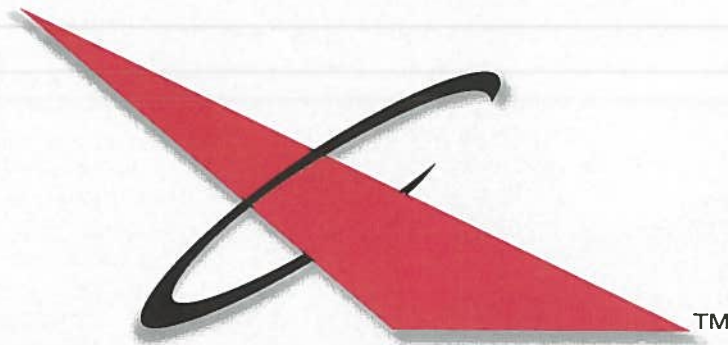
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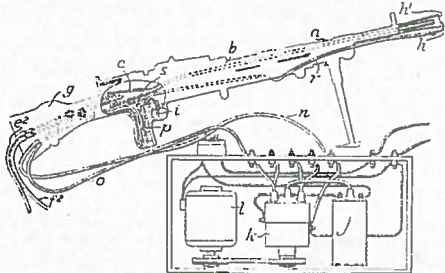
Above, left: managing director David Bissett-Powell surveys the premises from the mezzanine floor, while (top right) sales manager Martin Kelly is pictured in the loading bay with finished product ready for shipping.

Following our story last month on Martin Audio's move to new 20,000sq.ft premises in Cressex Business Park, High Wycombe, these pictures show the impressive interior of the building. Since transferring operations to the new site, Martin have been incredibly busy and the Wavefront 8C system has been doing increasingly well. Music Marketing Services have specified Wavefront for the main sound reinforcement system at London's new Australian theme bar, Walkabout Inn. Converted from the Bottom Line, once a high profile venue for live Irish music, the venue will use four Wavefront 8Cs with six WSX sub-bass units, processed through Martin's MX5 controllers.

Theatrical Patents: 50 Years Ago

625,230. Firearms for theatrical use. D. & P. STUDIOS, Ltd., and SNOW, A. ACKLAND. June 30, 1947, No. 17188. [Class 132 (i)]

A firearm for theatrical use comprises a hollow barrel, a stock, a trigger, means admitting an explosive gaseous mixture to the barrel and electric means adapted to ignite the gaseous mixture on pressing the trigger. In the figure, a firearm of the sub-machine gun type comprises barrel *a*, stock *g*, trigger *l* and gas conduits *e*, *f* supplying for example oxygen and acetylene to mixing chamber *c*. Gas tube *b* leads from the mixing chamber to the nozzle of the gun where sparking points *h*, *h'* are situated. Electric motor *i* rotates the rotary distributor and make and break device *k* controlling the primary and secondary circuits of induction coil *j*. High tension cables *o* and *r* supply high tension impulses to sparking point *h*, while sparking point *h'* is earthed via the metal parts of the firearm and earthing lead *n*. But unless the trigger is pressed, no sparking



occurs at the spark points since leads *o* and *n* are normally connected through tongue *p* and plunger *q* which break contact with each other on pressing the trigger. If desired, a single spark generating apparatus can deliver spark impulses on two or more separate circuits and thus operate two or more firearms.

No. 625,230 of 1947: Firearms for Theatrical Use by D & P Studios Ltd and Arthur Ackland Snow

This invention is intended as a prop firearm for use in theatres or film studios. Rather than rely upon blank cartridges, this uses the idea of igniting gases to cause small explosions which simulate the sound of gunfire. A mixture of oxygen and acetylene is ignited remotely by an electric spark. The intermittent high tension current which produces the spark is derived from a coil or similar arrangement, employing an interrupter device corresponding to the rate at which the gun is required to work. By adjusting the timings accordingly, the gun can produce the effect of varying rates of fire.

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Woodville Upgrade to Celco Ventura



The 450-seat Woodville Halls in Gravesend, Kent, has become a regular venue on the concert and theatre touring circuit since it opened its doors way back in 1961.

For almost a decade it has been running on the same sound and lighting technology, and technical manager Paul Whitehead decided that when the software on his lighting desk failed one too many times midway through a show, it was time to replace it, along with his sound desk.

Having opted for a Ventura, Celco's new sales support recruit (and Shed 7 lighting designer) Pete Sarson spent several days on site, programming in colours, beams and gobos, and showing Whitehead and technical assistant Roland Baker around the architecture of the desk.

Pictured above is Paul Whitehead with his newly-installed Ventura 1000.

Welsh PA Specialists Combine

Two prominent South Wales pro audio companies have pooled their resources to form a new enterprise. Vaughan Sound Installations Ltd represents a initiative by PLASA chairman Paul Adams of PA Installations, his wife Charmaine and Richard Vaughan, formerly of Vaughan Sound Systems Ltd.

Paul Adams emphasised that the expansion was opportunity driven and the timing near-perfect, having moved his own firm PA Installations into a new 10,000 sq.ft independent unit on Llanelli's Dafen Park a month ago. The two companies will now trade autonomously side by side.

He told L+SI: "The function of the new company will be to service clients in the sectors in which they are traditionally strong - such as large-scale industrial sound - while at the same time undertaking sales for PA Installation in the audio visual market. It will also service some of the installation work that PA Installations left behind during its expansion with Vaughan Sound Installations filling the gap left for smaller club and pub installations."

Meanwhile, the original Vaughan Sound Systems has restructured and will operate independently from its Swansea base as Vaughan Sound Hire Ltd.

Canuti Flies Off

Daniele Canuti, who was the public face of FLY, the Italian manufacturer of FOS automated projectors and other lighting devices, announced just prior to the SIB Show in Rimini which took place in late March, that he was leaving the company.



Canuti, who says that he is still a shareholder in the company, told L+SI: "It was a difficult decision, but my partners and I find that we have different ideas about the future of the company and its working philosophy."

Gareth Balderstone, who previously worked for La Novalight in Italy as their international sales manager, has now joined FLY in a similar capacity and was already active on their stand at SIB.

People on the Move

Vari-Lite Europe have recently made several new appointments. **Derek Jones** joins the company as technical sales manager following a long career in theatre lighting. He will be the first point of contact for new clients providing technical information in the planning stages. **Andy Powell** joins the company as customer support co-ordinator for Irideon and will be working with clients on technical support and commissioning projects throughout the UK. And finally, **Matthew Croft** has made a move to the customer operations department as custom production manager after spending five years as a Vari-Lite technician. He will be responsible for handling rentals from the enquiry stage through to execution.

Chrysalis Retail Entertainment has appointed **Gerard Bouton** as new product development manager and **Mark Leahy** as new business development executive. Bouton's marketing background brings a wealth of experience in developing and launching successful products in the marketplace, while Leahy brings valuable sales, product and industry knowledge to Chrysalis, having spent the previous seven years working in the lighting and sound industry.

Dale Bradshaw, formerly of Coe-tech, has joined the Formula Sound team as sales and marketing manager. He takes over from marketing manager Mike Parry who is moving on to concentrate on his own consultancy business.

Sussex-based Next Two has appointed **Gordon Hall** as technical sales manager. Hall brings with him extensive experience of the loudspeaker market and is a well known figure in the industry.

David Wilkins has joined Lancelyn Theatre Supplies. Formerly of Cerebrum Lighting, Wilkins will take on the role of manager of the Oxford sales and contracts division.

Microphone and headphone manufacturer, beyerdynamic, have appointed **Lee Wakelin** as market development manager. Formerly operations manager at Crest Audio, Wakelin brings six years' audio distribution experience to the company.

After many years of pursuing a career as a freelance sound designer, **Richard Rogers** has rejoined TP Sound in the role of production manager. His main task will be to help expand and strengthen the corporate presentation and events side of the company.

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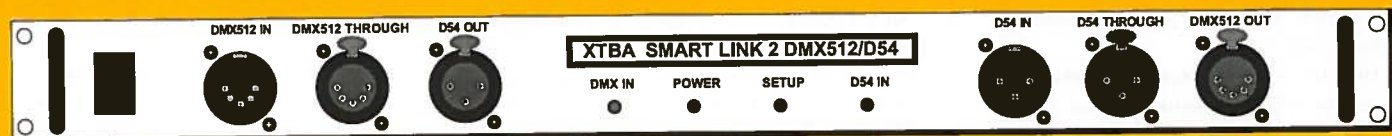
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ETC Expand Asia Presence



Above, left: Jimmy Cheung of ETC Asia. Right: Cheung is pictured at the Hong Kong office with (from left) Tommy Chan, Vera Yan and David Ng.

ETC Asia was formed in the spring of 1995 and, pragmatic about the forthcoming changes due in Hong Kong this summer, the company's Jimmy Cheung confidently predicts that they will be the leading stage lighting company in the region within a two-to-three year period. Having spent 27 years with Strand Asia, Jimmy heads Electronic Theatre Controls Asia Ltd as managing director, and has assembled an experienced team of seven people to take care of the region.

The area covered by the operation includes all the Far East and Pacific including both Japan and Australia, and it also embraces India and Pakistan. Area co-ordination of both sales and servicing is via the Hong Kong office, which is also a stockholding base, and there is close contact with the various regional ETC distributors such as Jands in Australia.

Jimmy Cheung has his sights set on installation work, and has already won major contracts in the region. The company is particularly strong in Japan where he proudly told me about a recent single order from their distributor for no less than 4,000 Source 4 luminaires.

The team at ETC Asia, in addition to Jimmy, includes sales manager Tommy Chan, chief engineer David Ng, senior engineer KK Yeung, office administrator Vera Yan, account clerk Wendy Cheung and store-keeper/clerk ST Choi.

XTBA End Association with LSC

XTBA have announced that they have ended their seven-year association with the Australian manufacturer of DMX products, LSC Electronics. Over the past seven years, XTBA has successfully built up sales of LSC's range of splitters and soft patches to a wide client base, but have reconsidered their position following the formation of LSC UK. Chris Cook of XTBA told L+S: "We will continue to service any LSC products still under warranty, but we will no longer be taking orders for LSC equipment."

Titanic: The Disaster Continues . . .

Forget good taste: the tragic sinking of the Titanic in 1912 is to be brought to the stage in a new musical production in New York. Unfortunately for the backers, the first two preview performances of the show have had to be cancelled due to a technical hitch: they can't get the Titanic to sink! The mock-up of the ill-fated liner should appear to hit an iceberg and then go under, but so far it simply refuses. Perhaps some fog machines might help?

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50 Years of the Radio Microphone

Here's a little quiz for the sound boys out there. 1: Who invented the radio microphone? 2: In which year was it invented? and 3: Where was it first used?

And here are the answers, in order. 1: Reg Moores. 2: 1947. 3: Aladdin on Ice at the Brighton Sports Stadium (1949).

So now you know. Reg now lives in Brighton and following a phone call from Brighton-based MBI Sound & Light, who happened across the remarkable Mr Moores a while back, I went to meet him. At the age of 75, he remains active in research and is currently dabbling in the field of Nuclear Quadrupole Resonance Spectroscopy, which is, he assures me, like the radio mic, very simple really.

It is interesting, given the wide usage of radio mics today, that it was first seen only as the tool that would allow musicals to be staged on ice. This was mainly due to the fact that ice was very much Reg's own domain, having toured as a young man as one of the world's few ice-skating fire-eaters. His performing career, combined with his flair for electronics, brought the radio mic to the ice dancers of Brighton in 1949.

His first radio mic was a hand-held, which now resides in London's Science Museum. In order to avoid the attention of the General Post Office who, bizarrely, held an absolute monopoly on any form of electronic communication, Reg called his invention the 'Telesonic Microphone'. The transmitter contained three army surplus valves, this being long before the advent of the transistor. Working in his kitchen, he soldered directly onto the contact pins of the valves to save space. Another compartment held two batteries, LT and HT. When the opportunity arose to use the mics on ice, Reg came up with the first belt-pack transmitters, which were fashioned from army surplus component boxes, held on with a fireman's belt, along which the antenna was stitched in a zig-zag pattern. The mic was sewn into a vent on the chests of the dancers' costumes and covered by a metal half-cone which held the vent open and channelled the sound downwards.

Reg didn't really know how effective the units would be: "As the belt carried the antenna, would the signal be horizontally polarised, or as the artiste would also radiate, would it be vertical? What about reflection and interference generated during the show, not least from the carbon arc spotlamps?"

"Today they use double diversity receivers to overcome these problems, but we devised a system whereby a continuous loop of 7.029 insulated electrical cable was strung around the whole of the arena and connected to the receiver aerial inputs. As 'wireless' relies on the capacity between aerials, the theory was that wherever the mics were within the loop, the capacity would remain constant. This worked perfectly throughout the whole run of the show - with no signal loss or interference at all - sometimes they can't do that today!"

Unfortunately, ice dance suffered similar problems to those encountered by the movies with the coming of sound. As Reg puts it: "Skaters are good at skating and singers are good at singing." Despite that problem, the radio microphone has gone on to become one of the most ubiquitous pieces of equipment in the entertainment industry and, in the form of the electronic bug (for which invention he is also credited), a favourite toy of the world's secret services for many years.

Lee Baldock



Reg Moores pictured with one of the world's first belt-pack transmitter units.

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Old Dogs Need New Tricks?

According to the latest Plimsoll Analysis, established sound system companies are under threat from new entrants to the industry. Even with favourable economic conditions, the dynamic cycle of business is still claiming its victims and there are plenty of new aggressors hungry for extra market share.

The current edition of the Plimsoll Analysis - Sound Systems - covers the full spectrum of the industry from manufacturers, through to engineers and retailers. Using the last four years audited accounts, the financial performance of each of the 408 companies involved have been analysed, including 92 companies new to the industry since 1990. In comparing sales growth it was found that the older companies could only manage an average 9.1% increase in the period reviewed, whilst the new entrants turned in an average 14% increase in sales. If you would like a copy of the survey contact Plimsoll Publishing, telephone (01642) 230977.

Denon Limited Edition

Denon are releasing a special 'Limited Edition' version of the DN-2000F Mk2 Twin CD player to celebrate 100,000 units sold worldwide. It was at the 1991 NAMM Show in Los Angeles that Denon launched the first generation DJ Twin CD player. Each of the 'Limited Edition' machines are in a unique blue finish with a engraved gold reference plate.

Retail Theatre



At the new Nike Town at 57th Street in New York, architecture and theatre have combined to create a unique retail showcase for Nike. Every 30 minutes, the central atrium of the store is transformed through mechanised scenic effects, lighting, sound and video into a dramatic, multi-media showcase thanks largely to Harris Production Services (HPS), who worked closely with Nike from concept design to completion on the multi-media and scenic theming production.

The company provided the lighting, sound, video, mechanised effects and scenic theming. The HPS team included production designer Duke

Durfee, creative supervisor Brian Webb, lighting designer Natasha Katz, sound designer Francois Bergeron, video equipment designer Josh Weisberg and project manager Michael Welch.

The main focus of the multi-media presentation is the 'transportation wall' which is positioned in front of a bank of escalators. Designed and built by HPS, it contains three vertically stacked 34' wide roll down screens. There are three clocks, mounted at the top which show the time of day, a chronometer and a 8' x 24' neon digital clock which counts down to the next presentation. Before a projection screen begins to move into position, shoppers feel the anticipation and excitement as the central atrium is transformed through dynamic sound and lighting effects as mechanised shades block out the daylight from the overhead skylight and the arched front window. In the main show, the top screen rolls down 37' as the central atrium and 'transportation wall' are filled with automated lighting effects and multi-channel sound. Video projection fills the screen with seamless images from six video projectors integrated into the architecture. The combination of the size of the video presentation, sophisticated lighting, sound and mechanised scenic effects reinforce the powerful video presentations developed by David Poremba, Mark Mullen and Danny Rosenberg at Nike.

A new version of the Stage Command System, designed by HPS and built by Scenic Technologies, provides computerised closed-loop motion control of the mechanised effects whilst the new HPS Show Command System provides show control of the lighting, video and sound systems.

Communicate 3

And jr makes three

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regional Master Dealers, the Source Four jr complements the larger profile unit and will bring the technology and professionalism of the Source Four to a wider audience.

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nevertheless offers a beam quality, efficiency and energy savings pro rata to its size. With a heavy duty, faceted glass dichroic mirror, designed using the computerised optical development system at ETC's research facility in California, the Source Four jr uses the same 575 watt HPL lamp as the Source Four, offering a cool beam and increased shutter and gobo life. Unlike the Source Four the Source Four jr has a fixed barrel and is available in three beam angles 26°, 36° or 50°. Using the same colour frame as the Source Four, the Source

Four jr accepts M size gobos and standard accessories such as the snoot and donut.



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PCM Record Month

PCM recorded more Lodestar sales in February than at any time in the company's history. Export orders have been despatched to Austria, Holland and the Czech Republic, as well as to Edwin Shirley for a large project in Japan. Other sales include an order to Vertigo Rigging which will be used on the rigging specification for Disney's *Beauty and The Beast*, scheduled to open at London's Dominion in May.

The National Lighting Design Awards 1997/8

The purpose of the National Lighting Design Awards, organised by the Lighting Industry Federation (LIF) and sponsored by several industry trade associations including PLASA, is to promote the importance and influence of good lighting, and to commend energy efficiency and innovation in the design of the lit environment. LIF have recently restructured the awards to include the public lighting and civic centre schemes that had previously been covered in other competitions.

The deadline for entry has also been extended giving entrants more time to prepare submissions, particularly for the two new exterior lighting categories: Town Centre/Public Amenity Lighting, and Road Lighting. In addition, any scheme completed by the new qualifying deadline of 15th August 1997 is eligible to enter. Entries should be received by Friday 26th September 1997.

For further information contact Siobhan Magog at the LIF in London, telephone 0181-675 5432.

James' Diamond



Manchester-based DBN Lighting have purchased an Avolites Diamond III for the James' tour. James' LD is Geoff Buckley who produced an imaginative projection-based show for the opening UK section of the tour. The rig included six new Clay Paky Stage Scans also bought for the occasion, 16 High End Trackspots, eight Martin Pro 400s, cyc units, Deathstar strobes, Optikinetics' K2 projectors and numerous Pars.

Channel 5 Launch

Creative Technology supplied video and projection equipment for the press launch of Channel 5's programming schedule which took place at London's Oxo building in February.

The main presentation area housed five screens, with rear projection supplied by five Barco 8000s supported by Dataton Smartpax units. Across these were relayed images covering programming plans, speaker support graphics and live feeds from two Sony DXC D30 cameras.

A further five themed areas were used for interviews with Channel 5 representatives. Four of these were equipped with 12 video monitors of varying sizes, including a Sony widescreen, showing Channel 5 showreels. The fifth area, dedicated to cinema, was equipped with a front projection Barco 8100.

In addition, CT brought in sister company Dimension Audio, to provide sound support.

Lamba US Distribution

Lamba have broken into the American market with their KAM range of club and DJ mixers thanks to a chance meeting with John Terry of Florida-based Pro Mix.

Introduced by Stanton's Frank Conlan at last November's LDI Show in the States, Terry and his partner Denny Anderson realised that the two companies shared certain objectives. By the time they arrived at NAMM Show in January, Pro Mix had set up a network of dealers, and are now represented in 36 states. The trading arrangement was formalised at the Frankfurt Musikmesse in March when Pro Mix were officially appointed Lamba's North American distributors, and confirmed a substantial opening order of KAM disco mixers and CD players.

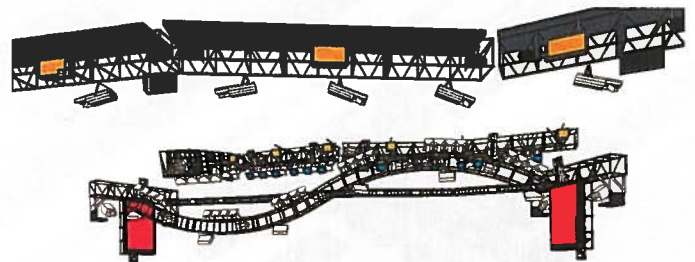
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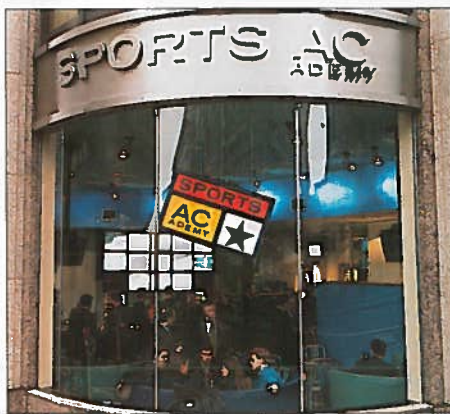
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New Bass Bar



Chrysalis Retail Entertainment has created a full range of bespoke audio visual equipment for Bass' new Sports Academy bar, which opened in London in mid March.

The company has installed a range of equipment including 'Punch buttons' to release sound effects such as clapping, cheering, booing and laughing. The company also fitted a 3x5 videowall behind the bar in addition to 18 TV monitors and a row of four 28" monitors. A combination of different video sources can be run at the same time from the satellite TV, videos and Kaleidolight package. Chrysalis, in conjunction with Kaleidovision, has also designed software for the video switcher to allow staff to control the output of eight video sources fed into the many screens. A Cloud mixer controls the music sources which include a CD player, VCR and satellite played through 12 Bose speakers.

EnTech in Melbourne

EnTech 1997, which will run alongside the Venue Management Association Annual Show, will take place at the Melbourne Exhibition Centre from April 23rd to April 25th. The organisers have broadened the appeal of the show by extending the line up of seminars, workshops, forums, clinics and training sessions. For more information contact Connections on +61 2 9876 3530.

V-L Branch Further into TV Market

Vari-Lite Europe are set to increase their workload in the television sector with programmes scheduled between March and May. A new programme, 'Whatever You Want', sees the first use of the Vari*Lite Constant Current Control Dimmer Module (C3). The C3, used to control incandescent lamps, fits into the Modular distribution rack and is interchangeable with existing APS6 units. Other equipment to be used on the shoot includes two VL5s and 17 VL6s with wide angle lenses, all controlled by an Artisan Plus. The programme's lighting director Brian Pearce is also involved in various TV projects including 'Confessions 8'.

The show 'Tomorrows World', lit by Bernie Davis, also marks the debut of the VL5A - 16 in total. Other shows featuring Vari-Lite products include 'Saturday Night Fever' (LD John James), 'Surprise Surprise' (LD John Fyfe), both draws of 'The National Lottery' (LD Martin Kisner) and 'Last Chance Lottery' (LD Robin Thorburn).

Blooming Marvellous

Built by the Mills Corporation of America, Ontario Mills, California's newest shopping mall is located just outside Los Angeles. Triple E was commissioned to provide and install track and power for one particular intersection designed by Lexington Scenery of Los Angeles to provide shoppers with an unusual scene.

Under a circular sky, painted with enormous flowers, a circular Triple E Unibeam track carries a giant 250lb watering can! Once an hour the watering can moves round the 17ft radius track, whilst fibre optic 'water' pours from the spout and massive flowers grow and bloom in huge garden planters below. The watering can is driven by a Friction Driver motor which, because of the unusual nature of the project, has been specially adapted to allow for the larger cross section of the Unibeam track. Five conductor rails supply the current, two to the Friction Driver and three to the watering can for the effects.

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Quality Commitment from Sagitter



Sagitter's headquarters in Bergamo, Italy.

The Italians are nothing less than prolific in their production of professional lighting. In fact, there sometimes seem to be almost as many different lighting manufacturers in Italy as there are types of luminaire. However, one name from the field that is still relatively unknown in the UK market is that of Sagitter. Established just five years ago, the company have built up a significant following in the rest of Europe and have recently chosen East Sussex-based Multiform Technology as their UK distributor. For a company so young, it can count some impressive credentials.

Sagitter was founded by Giulio Savoldi, once (along with Pasquale Quadri) co-owner of Clay Paky. Savoldi brought to Sagitter more than 20 years of experience in lighting and his own personal philosophy with regard to design and manufacture. His wife, Gabriella, also joined the company at an executive level, contributing her experience gained as export sales manager for Clay Paky in the 1980s. Together, they run Sagitter from its manufacturing headquarters close to the Northern Italian hillside town of Bergamo. The location may not immediately suggest cutting-edge innovation, but the impressive building houses a showroom of considerable proportions, a CAD-equipped design laboratory and a prototype development area, all of which belie the comparative youth of the company.

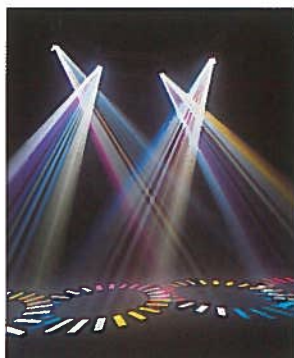
So, what is the Sagitter philosophy? As the company's commercial director Stefano Previtali explained, it is a commitment to high quality engineering. The emphasis is on power, not price and extensive collaboration with lighting designers and end-users is carried out before the commencement of the production process.

Two stages of development have been achieved with the company's established Infinity scanner: one an upgrade to the existing model, now renamed Infinity MSZ (Multi Step Zoom) pictured below; one a brand new model, the Infinity Live. The MSZ now offers remote control of the variable beam angles of 10, 12, 14 and 16 degrees, as well as faster motor response all round, to name but two of the improvements that have been achieved through investment. The Infinity Live was designed according to a brief which insisted on it being able to reproduce the effect of any luminaire. Its features include a fully variable zoom, CYM colour mixing and three indexable rotating prisms which work adequately towards fulfilling the brief.

At the Live! show in January this year, another addition to the Sagitter product range, the Tracer followspot 1200, received considerable attention on the Multiform stand. This spot boasts electronic, on-board, or remote control of focus, iris, dimmer and the inbuilt 24 dichroic colours, as well as a unique 'tracer' targeting system.

More recently, the latest Sagitter products made their debut at SIB in Rimini (see report starting on page 47). The Mask Colour Zoom 1200 professional colour changer, aimed at stage applications, comes in two versions (with an MSR or HMI lamp) and can create virtually any colour from the spectrum using CYM colour mixing. The light source is controlled through a sophisticated optical system allowing variable focus from hard edge spot through to soft edge wash.

Jo Boyd



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Colour Impact

Bar Mambo, which opened in Guildford just before Christmas, is the first customer for Turbosound's new coloured Impact speakers, an ideal accompaniment to the bar's vibrant Latin theme.

The Impact 80s, 16 of which are mounted high on the walls, are driven by matching IA-1400 amplifiers, and in support are two TCS-618s, to provide additional warmth and low-end response. The installation, which was carried out by Guildford Sound & Light, is ideal for Bar Mambo's diverse range of live music, everything from a nine-piece Brazilian band to a Memphis blues singer to live jazz. Music from Harper's nightclub downstairs can also be relayed through to the bar.

Turbosound has also recently given main dealership status to St. Neots-based Lightmasters UK. Lightmasters have subsequently specified and fitted HiLight boxes into the Duoglide Nightclub



in Manchester and Club Zinc in Rhyl, while another recent installation, Club Xenon in Tamworth, features Turbosound TXD-530s and TXD-518s. In all three venues Impact 80s have been used as peripheral sound and DJ monitor speakers.

Pictured above is Turbosound's Sean Martin (left) with James Foster of Lightmasters UK.

Dinosaurs Return

Jurassic Park has come to South Wales in the form of 'Tracking Dinosaurs', a new exhibition that investigates the fossilised footprints of the world's most remarkable creatures. It offers visitors a snapshot of the way in which dinosaurs roamed the earth, using a combination of full size skeletons, a robotic Triceratops and audio-visual equipment.

The AV elements of the exhibition feature five specially cut video discs handling five video signals and 10 audio tracks. The discs are played back using five Laser Disc Players centrally controlled by computer. The audio for the whole exhibition was recorded down to the 10 tracks available and distributed to various parts of the gallery. These provided lip sync for some of the video images being shown on 33" monitors, background music and additional speech channels.

A Strand Lighting GSX console was also used to control the 100+ channels of lighting. Using Strand's Communique software, the desk receives instructions in sync with the video images. The computer receives a frame count back from the master LDP and then 'on cue' sends the required instruction to the GSX. The set-up of the exhibition was complicated by the Museum's decision to install new lighting and AV distribution facilities within the Gallery. Theatre Vision, Strand's Welsh dealers, undertook the installation of four LD90 dimmer racks, associated GSX and other controls and also a new AV distribution system.

Tomcat Provides Truss for Collins Tour

Tomcat UK Ltd has supplied Concert Production Lighting with over 50 sections of the company's new stacking truss for the current Phil Collins tour. The truss, designed by Mark Fisher for Brilliant Stages, is manufactured under license by Tomcat at both their manufacturing facilities in the United States and in the United Kingdom. Tomcat USA Inc also contributed to the grid with custom truss sections and I-beams to facilitate the in-the-round format of the 'Dances into the Night' show which is now touring in the United States.

Communicate 4

A small difference from M&M

The world's smallest production colour changer is the brand new Stage 1, which complements the existing Rainbow range from M&M and is designed to widen the use of colour changers in the amateur theatre by offering an affordable unit to fit traditional 650W theatre lanterns.

Utilising the latest in micro-processor technology, the Stage 1 offers silent performance, easy loading, auto calibration and perfect positioning for up to 16 colours. A dedicated distribution box provides power and DMX for up to six scrollers and is fitted with standard modular connectors (telephone sockets).

The Stage 1 colour changer capitalises on a concept which has been used very successfully on the much larger 15" and which enables the colour changer to be fitted on to a wide variety of

lanterns. A universal adaptor allows the Stage 1 to be fitted to lanterns with a gel frame holder of 125mm to 160mm in size, including the Selecon Acclaim and ETC's Source Four jr, plus all traditional 650W lanterns.

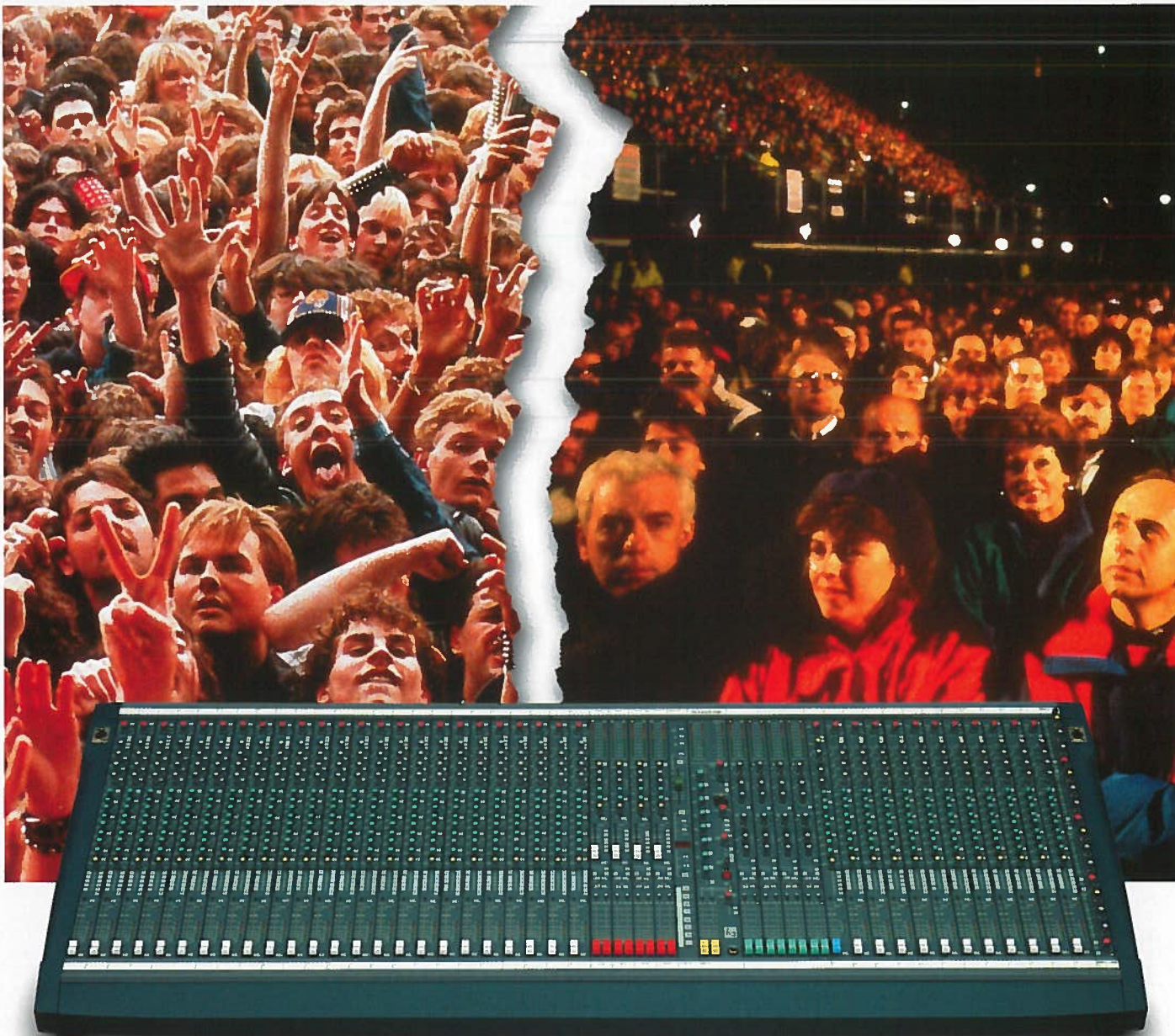
As befits its size, the Stage 1 has a suitably scaled down price, bringing the technology and professionalism of Rainbow colour changers to a wider audience. Even more economical is the '4 pack', which contains four Stage 1 colour changers complete with distribution box and cabling.

"As befits its size, the Stage 1 has a suitably scaled down price"



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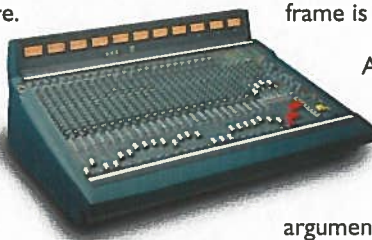


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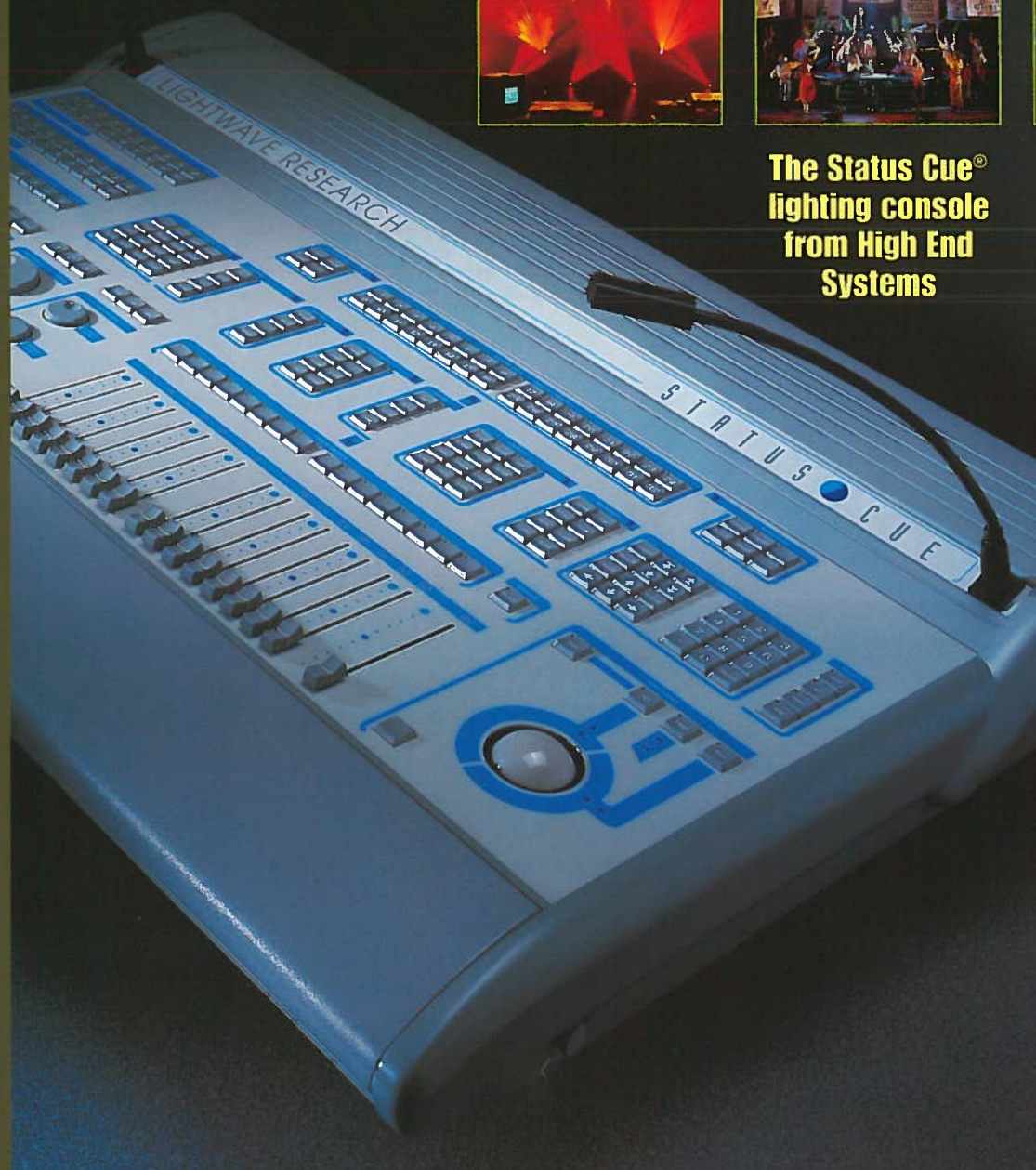
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Philips Invest in Lighting Centre



Pictured above is the new £5million Philips Outdoor Lighting Application Centre based in Lyon, France, which the company hope will become the European focal point for all major forms of outdoor lighting. The centre, the only one of its kind in the world, has been specifically designed as an outdoor laboratory to allow designers to experiment with the effects of different light sources.

Touring Sound for Out of Joint

London-based Autograph Sales has supplied a sound reinforcement system to the Out of Joint touring theatre company. The project's brief - compiled by Out of Joint's sound consultant Paul Arditti - called for a completely self-sufficient touring rig that could be installed and operational within two hours. Autograph advised on the final design and assembled the entire system.

Utilising a pair of Meyer Sound UPL-1s as the main loudspeakers, the system also makes use of two pairs of EV SX200s for effects replay, powered by Lab Gruppen amps. A 16-input Soundcraft K3 console fulfils the mixing duties, supported by an 8-input Spirit Live.

Two input racks were assembled, with the larger containing an Akai S3200 sampler, Denon Mini-Disk recorders, CD player and cassette recorder, plus an Alesis effects unit and a Tascam DA30 DAT recorder. The touring company was founded in 1993 by director Max Stafford-Clark and producer Sonia Friedman, specifically to present the work of new writers and has received a National Lottery grant towards technical equipment, including sound and lighting.

Icon Network Expands

Powerlight, well known in central Europe as a conventional lighting supplier specialising in commercial presentations, television and industrial events, will operate a new LSD Icon franchise in Switzerland. Licensed to provide Icon service in Switzerland, Austria and Germany, the company are also well positioned geographically to cater to customers in Italy and France.

LSD has also unveiled a new logo which the company claims is symbolic of the changes that have taken place since it re-launched itself two years ago.

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allows the crosspatching of a large number of DMX512 outputs to a smaller number of DMX512 inputs. Master unit has integral LCD and function buttons to setup crosspatch and electronically label each input and output. Additional slave units each providing an additional 6 inputs and 12 outputs can be connected to the Master providing up to a maximum of 24 inputs and 48 outputs.



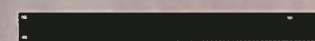
DMiX - a DMX512

merge unit providing 2 inputs to 1 output. Fully isolated and buffered, the DMiX allows the second inputs DMX start address to be offset against the first.



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TP's Manna from Heaven



We increasingly hear of PLASA members applying their expertise to ever more bizarre applications, and this month's award must surely go to Theatre Projects who recently supplied the two lighting systems that illuminated the Ideal Homes' central attraction - an animated, living rain forest!

The rain forest (the lighting effects were designed by Steve Rosen from Available Light of Boston, Massachusetts), 'performed' three shows an hour with the audio visual experience including rain, thunder and lightning. TP provided a full lighting rig, incorporating 200 Par cans and 90 ETC Source 4s, in addition to F100 smoke machines, Diversitronics strobes and a DHA animation system, plus the dimming and control equipment. A second system was supplied to give the required quantities of 'sunlight', in order to keep the plants alive overnight. This consisted of 60 400W floodlights.

To consolidate TP's role in their more traditional markets, the company has also picked up the lighting contract for the Disney production of *Beauty and the Beast* which opens in London's Dominion Theatre in mid-May. TP will not only provide the conventional and Vari*Lite automated rigs, but will also handle set electrics, the new stage truck cable management system and the entire stage electrical refurbishment of the Dominion.

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De Sisti Celebrates its Fifteenth Anniversary in Style

To celebrate the fifteenth anniversary of its foundation by internationally acclaimed designer Mario DeSisti in February 1982, DeSisti Lighting hosted a major event at its Rome headquarters last month. Distributors from over 30 countries attended, and the highlight of the celebrations was a feast organised within the main production complex with well over 600 guests present for a full evening's wining, dining and entertainment.

Attendance from the TV and film fields was particularly strong, with AIC (Italian Association of Cinematographers) represented by its president, Marcello Gatti. Many other prestigious directors of photography also attended, and they included Tonino Delli Colli, Franco Di Giacomo, Pino Pinori, Guiseppe Rotunno, Dante Spinotti, Vittorio Storaro and Luciano Tovoli. From Italian television came acclaimed lighting designer Franco Ferrari. The Istituto Luce (Lighting Institute) was represented by its president, Dr Guglielmi.

The principals of numerous Italian production and rental houses were on site in force as were popular faces from various European companies including a contingent from the UK of Ron Pearce and Tony Lucas (Lee Lighting), Wick Finch of Isleworth Studios, cameraman Peter Hannon and Clive Salmon (GE Lighting). Also from the UK was John Offord of Lighting+Sound International



Dealers from over 30 countries visited De Sisti's Rome headquarters when the company celebrated its 15th Anniversary in March.

magazine and the trade association PLASA.

With a strong accent on product quality and performance, DeSisti has been responsible for numerous major technological advances in both the electromechanical and photometric areas of luminaire development. Trend-setting innovations include a full range of stainless steel lighting fixtures using single-end high efficiency discharge lamps (MSR) developed in co-operation with Philips and a full range of flicker-free electronic ballasts. The DeSisti range of motorised suspension devices includes motorised self-climbing hoists, telescopes, pantographs,

scenery hoists and most recently Icarus, a fully-robotic-controlled lighting system that integrates the positioning control of rigging and lighting systems.

The company has progressively developed its distribution network to cover 32 countries with exclusive representatives who cover the appropriate sales and service networks, a set-up that provides for the organisation to guarantee a constant service to end-users and global assistance to its customers around the world.

Close concentration on its worldwide network and maintenance of a very high level of personal contact emanating from its senior management in Rome - coupled, of course, with the establishment of a first-class product

range - has seen turnover jump from 9 billion Lire in 1987 to a projected 37 billion for 1997.

Announced at the event was a new dual power range of electronic ballasts with several new features. New lighting developments include totally new 400 and 575W units and improved features (drop-in lenses) for the 6k unit in the Remington range and upgrades to the big 12/18k unit in the Rembrandt range. These products will make their first US appearance at the forthcoming NAB show in Las Vegas and in London at the PLASA Show in September.



Sergio De Sisti (left) with Peter Kemp of Coemar De Sisti (Australia).



Family two-handers: Mario and Fabio De Sisti during a distributors' conference session.



Celebrations were organised in the main production complex with well over 600 guests present.

HÖREN

Come on, lights on!



Mario De Sisti with (right) Dr Sandro Parenzo (president of Gruppo Videa and Dr Guglielmi (president of the Italian Lighting Institute).



Fabio, Lia, Mario and Sergio De Sisti await the arrival of guests to the company's 15th Anniversary Dinner.



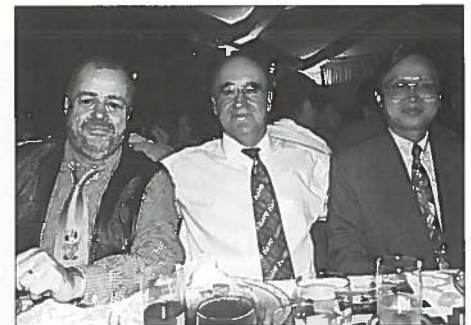
A UK table with Clive Salmon (GE Lighting), Ron Pearce (Lee Lighting), Wick Finch, Tony Lucas (Lee Lighting) and Peter Hannon.



L+SI's John Offord with Mario De Sisti and Gerard Jongerius of Flashlight (Holland).



Dr Carlo Degli Esposti, Vittorio Storaro, Giuseppe Rotunno and Franco De Giacomo.



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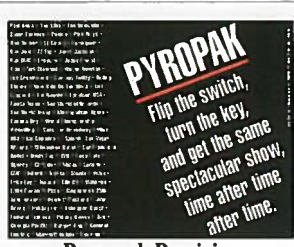
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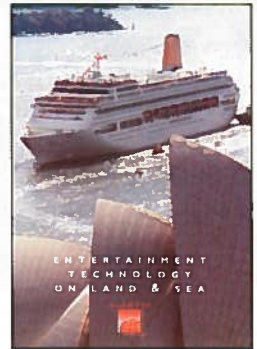
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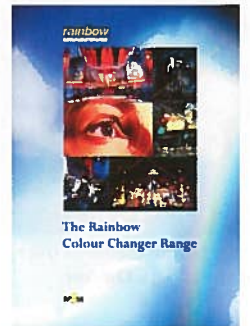
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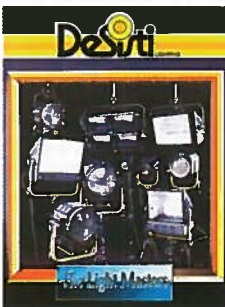
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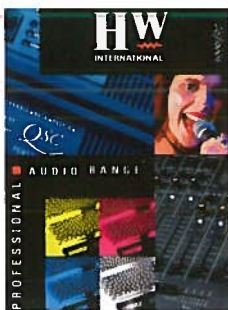
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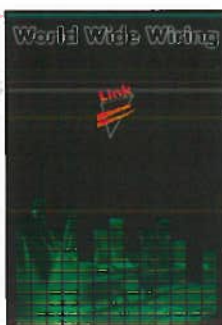


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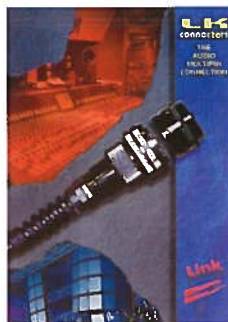
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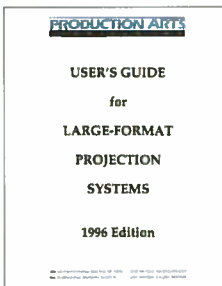
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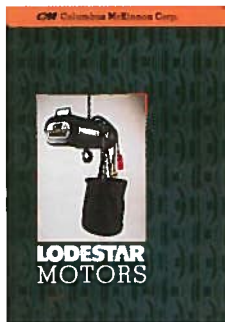
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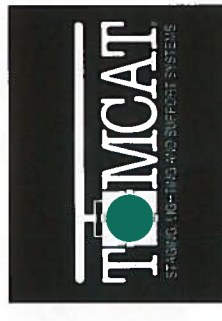
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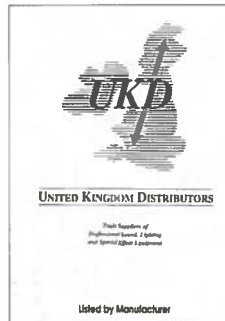
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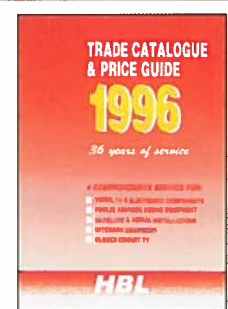
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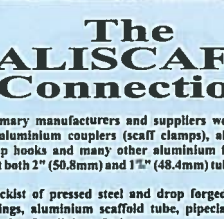
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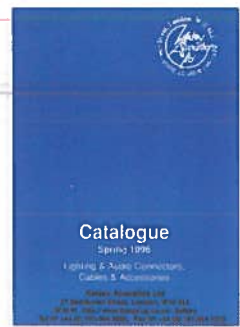
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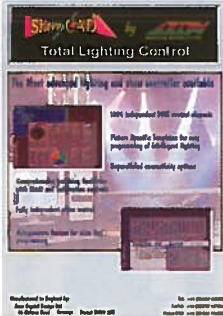
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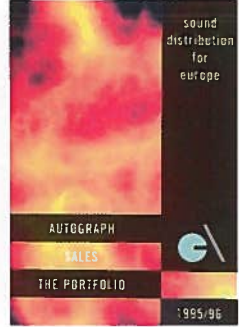
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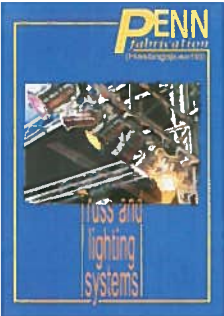
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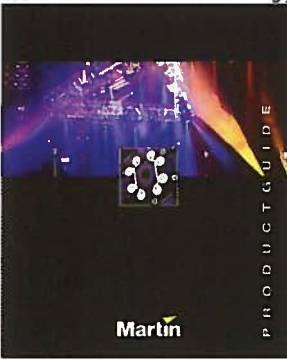
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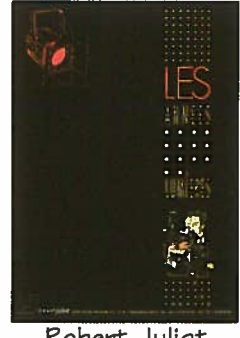
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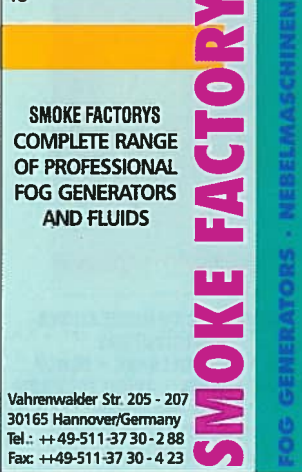
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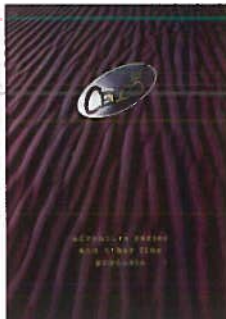
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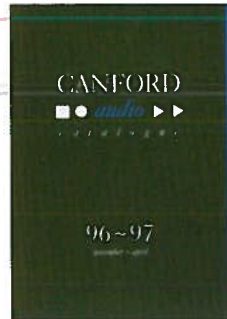
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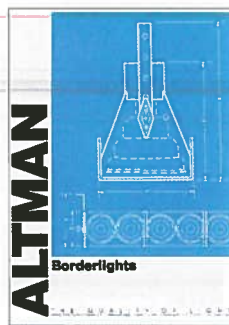
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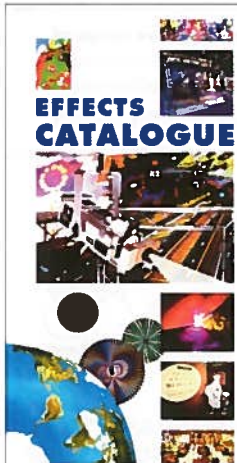
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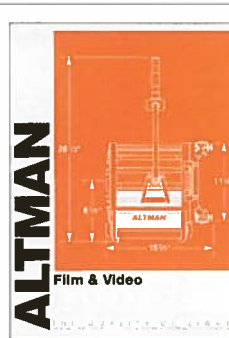
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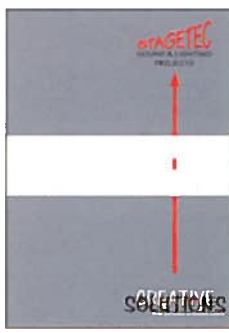
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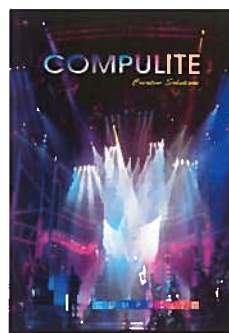
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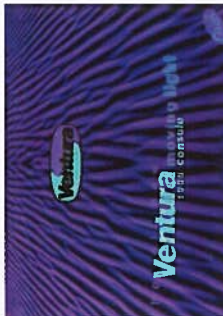
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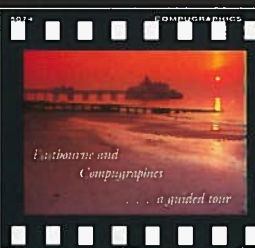
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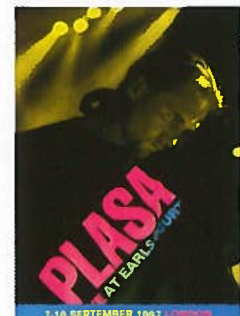


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Admiring in the Stalls . . . Ian Herbert

When I started writing criticism it was after reading it intensively for a couple of years in *Theatre Record*. I can do that, I thought, and 15 years later feel relatively justified in that arrogant assumption. But every now and then you come across someone who can do it so much better, that you almost begin to doubt whether you're in the right job.

That doubt has been resurrected by reading Tom Sutcliffe's *Believing in Opera*, published by Faber. The very word 'reading' betrays me: what I've been doing is skimming through the book's 400-plus pages, stopping at names or ideas that interest me and gaining a superficial view of some very intensive writing. I've promised myself I'll read the book properly, because it's fascinating, stimulating and immensely knowledgeable. But life is short, and so is my attention span. Faced with the work of someone who gets below the surface, who digs instead of skimming, and can still write with an awesome descriptive skill and freshness of style, my admiration is tinged with Salieri-like jealousy.

What Sutcliffe has done is nothing less than tell the story of opera-making over the last 30 years, in which the whole treatment of the art form has changed from standing singers in front of rickety stagecloths to fully worked, strongly acted productions of great dramatic maturity. Opera has grown up, he explains, in terms particularly of direction (production, as opera people still quaintly call it) and design. In doing so, he reveals a wonderful ability to synthesise and order the experiences he has had in Europe's opera houses during that period. He's a trained musician, but what he talks about is the look of the productions he has seen, bringing them colourfully to life and also showing why this has been probably the most interesting couple of decades in the whole history of theatre design, and especially British theatre design. Much of his admiration is for designers turned director, like Richard Jones and Tom Cairns - his defence of Jones's controversial Covent Garden *Ring* is descriptive, polemic criticism at its best.

During most of that time I've been looking at straight theatre, and trying to emphasise, in a world of text-obsessed criticism, just how much of our perception of a play comes from its visual clues: I'm concerned with staging, not just because I mix more easily with you lot backstage than the folk out front, but because of a conviction that we should pay more attention to it than we do in writing about theatre. Sutcliffe, however, manages to be both pictorially oriented and highly musically literate. And what he shows is the huge influence of opera designers and directors on the legit stage. I know this from open-



Lady in the Dark at the National.

mouthed tours of the various exhibits of British stage designers at home and in the Prague Quadriennale, where their work has been consistently honoured. But here is chapter and verse, in accounts of the operatic careers of so many directors and designers who have had an impact outside the opera house. Go and get this splendid book.

There's only one area in which *Believing in Opera* is lacking, apart from the ludicrous quality of its sparse illustrations, which is more than compensated for by Sutcliffe's descriptive skills. That, surprisingly, is its very limited attention to lighting design. Wolfgang Göbbel gets a good few mentions, but Robert Bryan, Jean Kalman and Hugh Vanstone appear only once in the index, and the likes of Alan Burrett and Mark Henderson not at all.

Fittingly, we've had a chance to see the work of some of Sutcliffe's heroes on my side of the theatrical divide in these last weeks: opera director Franca Zambello has put on *Lady in the Dark* at the Lyttelton, Tim Albery has been responsible for Martin Crimp's fascinating *Attempts on Her Life* at the Royal Court, and Tom Cairns' *Cloud Nine* is one of the first productions of the Old Vic season mounted by Peter Hall, himself no mean opera hand. In all of them, design and lighting are strongly present, while remaining very much at the service of the total production - the kind of synthesis Sutcliffe would welcome and one which has grown stronger in recent years.

Lady in the Dark is not a megamusical and Zambello at the National has worked magic on it with a relatively limited budget. Much of it has gone into Nicky Gillibrand's forties fashion-mag costumes, for Adrienne Lobel's set is a simple affair of movable, sail-like screens with images that recall Feininger's paintings. The unspoken marriage here is between the fashion-plate Broadway of Moss Hart and Ira

Gershwin, the wordsmiths, and the Bauhaus Berlin of music man Kurt Weill. The subtlety of light that gives the production most of its style comes from a surprisingly small rig by Rick Fisher that works superbly - very little fancy new machinery and only one centrally mounted followspot.

Attempts on Her Life is a gift to the director and his design team, for the author specifies nothing in his series of stylish, mordant sketches loosely centred on the ever-mutating character of Anne, who can be a serial killer, a travel agent or even a model of motor car. His instruction is to let each scenario in words - the dialogue - unfold against a distinct world - a design - which best exposes its irony. Albery's way of achieving this is to use depersonalised, hard-edged, technological stage pictures: airport runways and lounges, TV studios and hotel rooms are conjured up by the spare design of Gideon Davey and the assertive lighting of Simon Mills. Both are newcomers, but Davey is a Linbury finalist and both have experience with opera.

Rather unexpectedly, Tom Cairns does not handle the design for his production of Caryl Churchill's sexy saga of gender-bending and British Imperialism, *Cloud Nine*. It has sets by Robin Rawstone and costumes by Sheila Thewlis, both new names to me. The full-sized stuffed leopard and the giant rhino horn which make much of the design point in the first act, set in sexually repressed colonial Africa, could be a tribute to another opera designer, Nigel Lowery. What is particularly pleasing - and rather surprising - about Rawstone's sets is that, like all three so far in Hall's season, they make no obvious concessions to the fact that they have to run in repertory seven nights a week. They do borrow some of the flats from John Gunter's basic season set, but they demand plenty of flying and establish high standards of their own. Lighting (harsh African daylight, twilight in a suburban park) is supplied - and very nicely, thank-you - by the season's technical director, Mark Henderson. Lighting for the Hall company's first new play, David Rabe's *Hurly Burly*, is by technical director Martin Hazlewood. All credit to him and everyone else involved in a venture which looks like outclassing the National Theatre's summer repertoire in scope and at least rivalling it in quality.

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NIGHT MOVES AT SIB

*Tony Gottelier and Lee Baldock discover
a blurring of boundaries in Rimini*

We detected a sea change at SIB this year. First of all, any pretence that there are several shows going on at the same time, one for the discotheque market and another for theatre and cinematography, seems to have been abandoned altogether and the exhibition has become, by default, an entertainment technology exposition under the SIB banner.

Mind you, the schizophrenia remains within the subtext where SIB is variously described as 'International Exhibition of Equipment and Technology for Discotheques and Dance-Halls and Rental Firms' and on the other hand as 'Light, Sound, Design - the Art in Technology'. Since the exhibitors are by-and-large the same each year, perhaps they should grasp the nettle and call a spade a spade as we don't suppose anybody gives a damn anymore what SIB originally stood for. After all, we all accept that entertainment technology bridges those arbitrary barriers these days and that it is entirely reactionary to be precious about it. Furthermore, APIAD, the Italian equivalent of PLASA and one of two of the sponsors of SIB, represents companies which span all these sectarian interests.

In Italy there does still seem to be some sensitivity attached to moving across the sectors, particularly, it appears, when reaching out from *Il Mondo della Notte* which, in Italy especially, is an entire counter-culture. Indeed, one leading manufacturer even felt the need to expose their fear that this could be a high risk strategy by openly revealing such criticism to press and distributors alike, while simultaneously declaring undying devotion to all market sectors.

Which brings us to the second shift of emphasis. The night counter-culture in Italy is a phenomenon not repeated to the same excess anywhere else in the world as far as we are aware. There, interior designers specialising in nightclubs are not just stars, they are Gods. Where else do you find discotheques capable of holding in excess of 10,000 people and routinely full to capacity? And where the exuberance is such that every night is like Mardi Gras in Rio? Perhaps in New York in the days of Studio 54, or in Manchester in the days of Northern Soul, but sadly with the emergence of the corporates, these are no more. But it is this avant-garde expressionism which adds the extra spice to SIB each year and which is, surely, the motivation behind the visiting foreign contingent returning each year despite the difficulties of access to Rimini out of season.

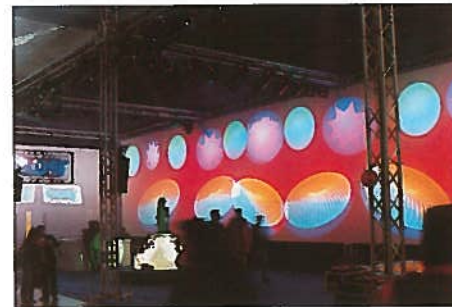
This year, however, we detected a considerable reduction in the incidence of those freak apparitions, and thus some of the buzz that went with them. The organisers will say that it is a more professional show for that, but that misses the point entirely. What they have done is to start a new show in May called NightWave, which is open to regular punters, and which has obviously siphoned off some of the energy from its parent. Shame.



MAC 600s on display in a small corner of the enormous Martin Professional stand.



Mad Lighting's multi-coloured Madscans attracted a great deal of attention at the show.



Performance 1200 scanners provided the effects for the eye-catching Coef stand.



Peter Sarson and Colin Whittaker with Wytec's Ben Weijters on the Celco/Electrosonic stand.



SGM's recently upgraded lighting effects added a splash of colour to the entrance area.



Owl's David Juby with Patrizia Invernizzi of Videasel International on the Seleco stand.



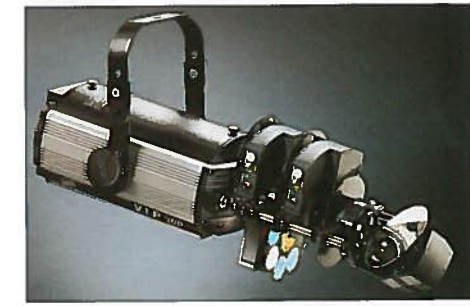
A scene from the FAL lightshow, on the stand built by co-exhibitors Total Fabrications.



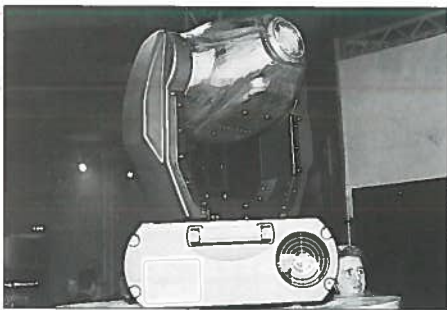
Pulsar's Derrick Saunders addresses the Clay Paky distributors' meeting.



NATs in action in the Coemar dome - the flying bird gobo was, unfortunately, too quick . . .



The stylish new V.I.P. 300 image projector from Clay Paky.



The new, and as yet un-named, fixture from Martin Professional.

Anyway, whether as a result of that, or because the stress of producing new technological 'eyecatchers' annually is proving too much, or because of the sheer weight of show expenses in egoland, or as the result of, quote: "... a market which is overrun by cut-throat competition ...", there are moves afoot once again to persuade the organisers that a SIB once every two years is, far and away, sufficient. The last time this came up, some four or five years ago, APIAD tried to make the change conditional on PLASA alternating with them every other year. Now, they must realise that isn't on the cards, and should go it alone if it suits them to do so. Naturally, there will be resistance from the good burghers of Rimini, for whom the annual influx in the hotels and restaurants in the early spring must be a godsend, but that's as it maybe, they must bow to the inevitable if that's the way the market is moving. The potential of exhibition halls to put 'bums in beds and on seats' will still be there. All that is needed is a creative idea to fill the halls in the alternate year. I am sure that there is plenty of potential amongst the other shows on the Rimini Trade Fair calendar for convenient date swapping to fill the hole.

Undoubtedly, the most talked about new product at SIB'97 was **Martin Professional's** prototype of a moving yoke luminaire using profile optics and based on the 575W MSR lamp with automated colours and gobos. With a target selling price of below £2,500, it doesn't take too much imagination to work out whose market this, as yet unnamed, MAC series product is aimed at. Apparently, there is a bit of a competition to come up with an appropriate



Studio Due's Anna Rita Rossi with the company's latest addition, the Live Pro 1200.

name. The best one we heard came from Robert Svensen of Martin's service department which, suggested by the black, finned shape of the prototype body, was MAC Stealth. Once again the dynamic Dane, whose picture graced a thousand poster sites at the Fiera (and surprisingly survived the graffiti artists unadulterated, at least in public view, to the end), has moved to steal the clothes of others. World domination, still the declared, as yet unfinished, intention.

That being the case the Martin World Tour 2000 stand (the word 'booth' cannot describe its labyrinthine vastness), necessitated a move to the business side of the bridge, where they were able to put on three shows which visitors were obliged to visit in sequence - a rock show, with lighting by Jonathan Smeeton (aka Liquid Len), a theatrical performance, with design by Albert Chan, and a disco light show by two of Ian Kirby's Maidstone-based team. A very clever demonstration was given of Martin's automated followspot system, Lighting Director, in which the projected image of a human eye appeared to follow the subject around the floor, and even gave a look of amazement as it took in a view of the new MAC.

Now, not to be outdone by Martin and High End, **Clay Paky** will also launch their own moving yoke, colour mixing, washlight at the PLASA Show later this year and, for all we know, a profile also. Plus ça change, plus c'est le même chose. However, at SIB they concentrated on getting their StageScan projector, first seen in Orlando, better known in Europe. Based on the HMI 1200 lamp with hot re-strike, the luminaire offers



Lighting Technology's Ron Knell (left) and Philip Norfolk show the company's new Lite-Dim dimmer/blackout units.

interchangeable remote zoom facilities, remote focusing and interchangeable rotating prisms and gobos. Other facilities have been enhanced for concert and studio use and, in particular, the fudge over shared control channels has been eliminated so that each facility has its own, including a lamp control channel.

Clay Paky's MiniScan is now available in an HPE version with much improved optical efficiency over the original MiniScan 300, and having withdrawn from the Italian distribution of JEM, as a reaction to the take-over of that company by Martin Professional, they launched their own smoke machine. This product is to be called Golden Fog - let's hope that they are not moved subsequently to launch a rain machine!

However, CP's big new push is for their Display Line, a development around two stylish projection engines which at last recognises that the system devised for the Rank Tutor series of projectors all those aeons ago, of two rails on which to mount a series of attachments, was not all bad. (Of course, those of us who cut our teeth on them knew this all along.) Cleverly, however, our Italian friends who have been beating us hands down in the projection department ever since the Tutor faded to black, have gone one better - by using the accessory rails to also transmit low voltage power (24v) to a wide selection of slide-on motorised attachments and effects. There are three models of this type; the VIP 300 using the HTI 300 lamp, the VIP DIA designed solely for the automatic sequencing of three, 35mm slides, and a halogen version, the VIP 250 ALO. In addition, there is a non-motorised framing spot, the SIP 300, in the range. Terrific stuff, but



Anna Sangalli and Le Maitre's Rick Wilson with the new Pro Stage II range on display.



The FAL stand, shared with Total Fabrications and Laser Innovations.



Lite Structures' Leanne Ripley and Adrian Brooks promote the new Litedeck Staging Co.



L-R: Ian Brown of Coe-Tech, Peter Kemp of Coemar-DeSisti and Colin Whittaker of Celco.

is 750 hours lamp life enough for this market?

Coemar see no need to emulate the moving body merchants, relying on their Total Movement, double mirror device to deliver a 360° global excursion. A vivid demonstration of the efficiency of this was achieved on their vast light-show-in-the-round projection screen where, by dint of a series of three NATs in a sequence of 18, a Greater Spotted Gobo bird took to the air in the most impressive simulation of flight. Coemar also unveiled a wider (20°) version of this projector with variable focus, now finding much favour in the touring scene especially in the US, and this extra chunky beam will certainly be popular with lighting designers.

Another new Coemar product in this show of no-names, is a spectacular centrepiece which, literally, defies description but is based on a single MSR 1200 lamp with 16 controllable beams and is a companion for the quadrant shaped Comet launched at last year's show. Coemar have also designed a high power profile called the Focus EHP, which uses the MSR 2.5k, and is intended for industrial presentations which was also an excuse to wheel a flash sports car onto the stand.

Among other highlights which caught our eye were GE's 800 Watt PAR lamp, which is as bright as the 1k with a remarkably even field for such a bubble and has the distinct advantage of enabling three lamps per standard dimmer channel. FAL's Medusa, a 2.5k or 4k turning hemisphere with inset lenses across its surface, couldn't fail to impress. As did Sagitter's Mask Color Zoom

A special word here about the UK's MAD Lighting, who are fast developing a reputation for real innovation and consequently have created a market niche for themselves in a very short time. Now, bravely going where others fear to tread, they have invested heavily in the tooling necessary to make sleek coloured plastic bodies for their projectors. While this may not appeal to some sectors, in the display lighting market and in pubs, themed restaurants and discotheques it will be very popular. What's more, although they are doing many colours as standard including UV reactive ones, you can basically order any colour or texture you require to suit your decor and the quantity makes no difference, from one-offs up. It must also be said, that once the cost of tooling is recovered, MAD will be in a very good position vis-à-vis the competition when it comes to cost of production.

Among the British contingent, Lighting Technology's DMX-controlled, aldis type, dimmer shutter, the Lite-Dim stood out. This unit can precisely and efficiently vary the light output intensity of high output discharge



Peter Wetherill of Smoke Effects Ltd with the small but popular Goblin smoke machine.

fittings where dimming the lamp is not possible, and comes in three sizes: 1200 for projectors with a lens of up to 140mm diameter, 1200A for up to 220mm diameter and the 2101 for those up to 400mm. Lighting Tech, like virtually all of the Brits in Rimini that we spoke to, were impressed with the quality of visitors to the show, from international markets as well as the Italian, and the response to their range of black light lamps and electronic flicker candles had also been very positive.

Also standing out was Zero 88's CueLine, a simple graphical display of sequential cues forming a complete show. Zero also reported a good deal of interest in their new Sirius 250 console, which will hopefully be joined by the Sirius 500 at this year's PLASA, while a new distribution system to make the Contour a complete package will be arriving very soon.

We wait with baited breath for the production version of the Starlite MkII automated luminaire being promoted by AC Lighting for manufacturer Starlite Systems, interest in which has remained high since it was viewed last September. AC were kept busy with Wholehog and WYSIWYG demonstrations (not to mention conjuring tricks, the first prize for which, however, goes to Mr. F. Lloyd of St. Albans) and the Chroma-Q plastic scroller was also continuing to pull in the orders.

PCM enjoyed a busy show (in what began to be called 'Brit Street', which isn't rhyming slang but the area in-between halls occupied by the PLASA group), with their range of Columbus McKinnon chain hoist motors. Echoing the satisfaction of other exhibitors, PCM's John Jones said that PCM had ventured to Rimini in search of an Italian distributor and the response had proved the trip worthwhile - and not solely from the point of view of the Italian market. He and PCM will definitely be back again next year.

Celco and Electrosonic exhibited together this year, as Electrosonic joined with Helvar srl to test the Italian market in advance of some very exciting new products due later in the year, details of which are being guarded for the time being. Again, the level of serious international visitors was praised. Celco's Colin Whittaker was joined on stand by Peter Sarson, who has just completed touring as LD with British band



Lamba's Gareth Collyer pictured at the official launch of WinCommander.

Shed 7, and was being kept busy demonstrating Celco's popular Ventura 1000 console along with the other members of the company's established lighting control products.

Technical lamp distributor MGC Lamps also joined the PLASA group, and were another exhibitor who will be returning next year, having had many excellent enquiries including a number from the Middle East.

Lee Filters were on hand with their latest innovation, the Colour Magic series of eight individual packs, each containing a selection of filters pertaining to a particular aspect of lighting and studio work. Among the eight packs available are Original (allows you to create 50 colours from 12), Arc Correction (colour correction range), Saturates (vibrant colours for stronger combinations), Studio (basic light source control filters) and Super Studio (for finer control of light sources).

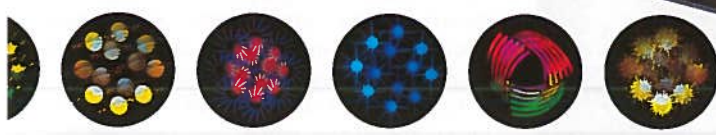
Optikinetics were once again exhibiting on the stand of their Italian distributor EtaBeta Electronics, and gave the first viewing in Italy of their K4 projector. These compact and attractively-styled units employ a 750-hour MSR575/2 metal halide arc lamp with 4,000 lumen output at lens and are suitable for a wide range of environments, from display projection in shopping malls and leisure facilities to theatre and studio applications. Other members of the K range of projectors were on stand demonstrating some of the company's comprehensive range of gobos and effects in a highly effective 'living gobo' display.

Avolites were in evidence on the Audiolink stand, with Tony Shembish demonstrating the new Shape Generator plug-in on the Diamond III console. Launched earlier in the year at Live! 97, this free software module allows designers to create patterns, either moving or static, manipulate them in real time and store for future use. Programming is quick and easy; for example, any number of fixtures can be programmed to 'describe' a circle by selecting just four buttons: 'Instrument Selection', 'ML Menu', 'Create A Shape' and 'Circle'. The circle can then be manipulated using encoder wheels. The Shape Generator is currently available as an add-on module for Diamond 97 software, with the Pearl and Sapphire following on shortly.

Also new from Avolites was the Truss Splitter, which is mounted in a rigid plastic tube and can be attached with heavy-duty Velcro straps to virtually anything. Operating from any AC mains voltage, standard units have 'DMX In' and 'DMX Loop Out' with a terminate switch. Three pairs of outputs are provided, optically isolated from the input and from each other.

On the other side of the road where the beautiful people hang out, 5 Star Cases were

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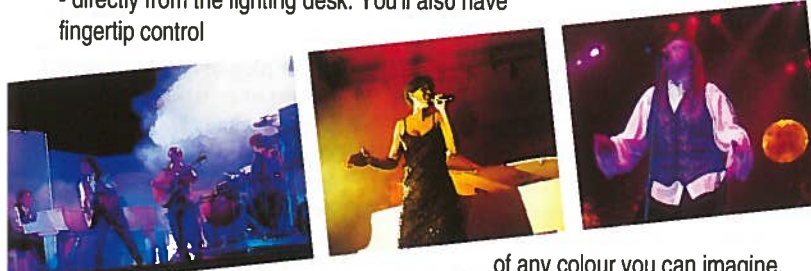
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With Stage Scan there's no need to hang around for the bulb to cool before switching on again: the built-in **hot-restrike igniter** means that the luminaire is always ready for action. You won't even be left in the dark after momentary power failures, so there's no need to keep your fingers crossed during thunderstorms! And when the shutter is closed, you can either power down the luminaire direct from the desk or select automatic power-down.

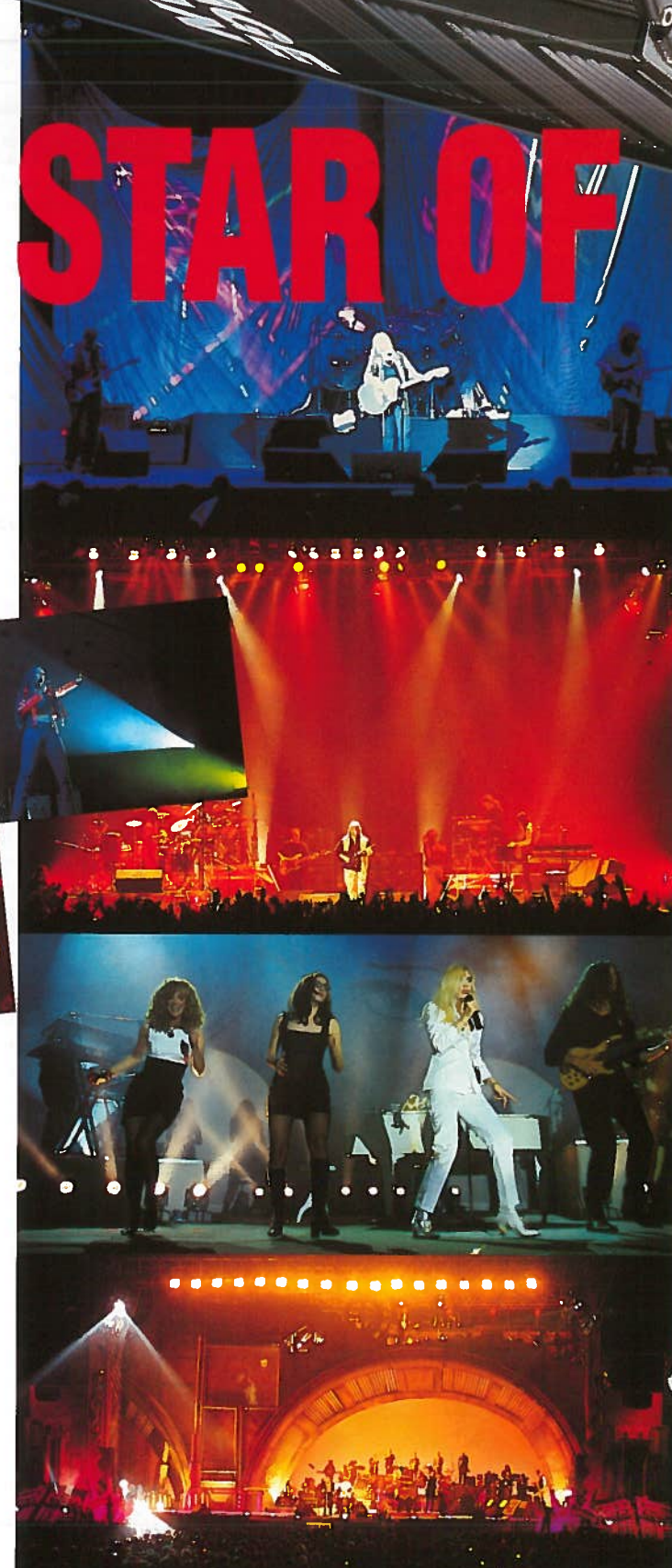
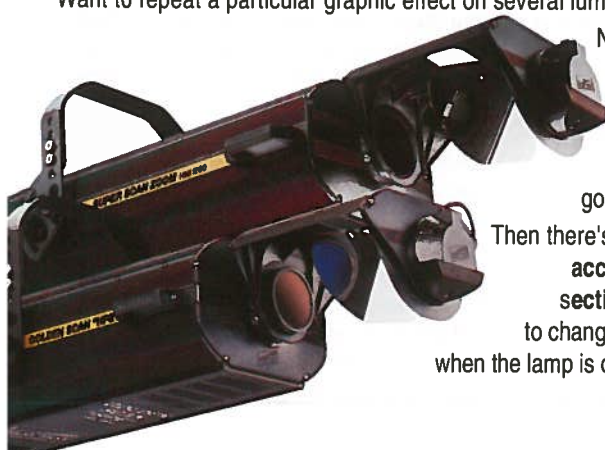
Stage Scan's innovative **MSZ (Multi Step Zoom)** system provides apertures from 13 to 25 degrees by selecting the most suitable of the fixture's 6 lenses - directly from the lighting desk. You'll also have fingertip control

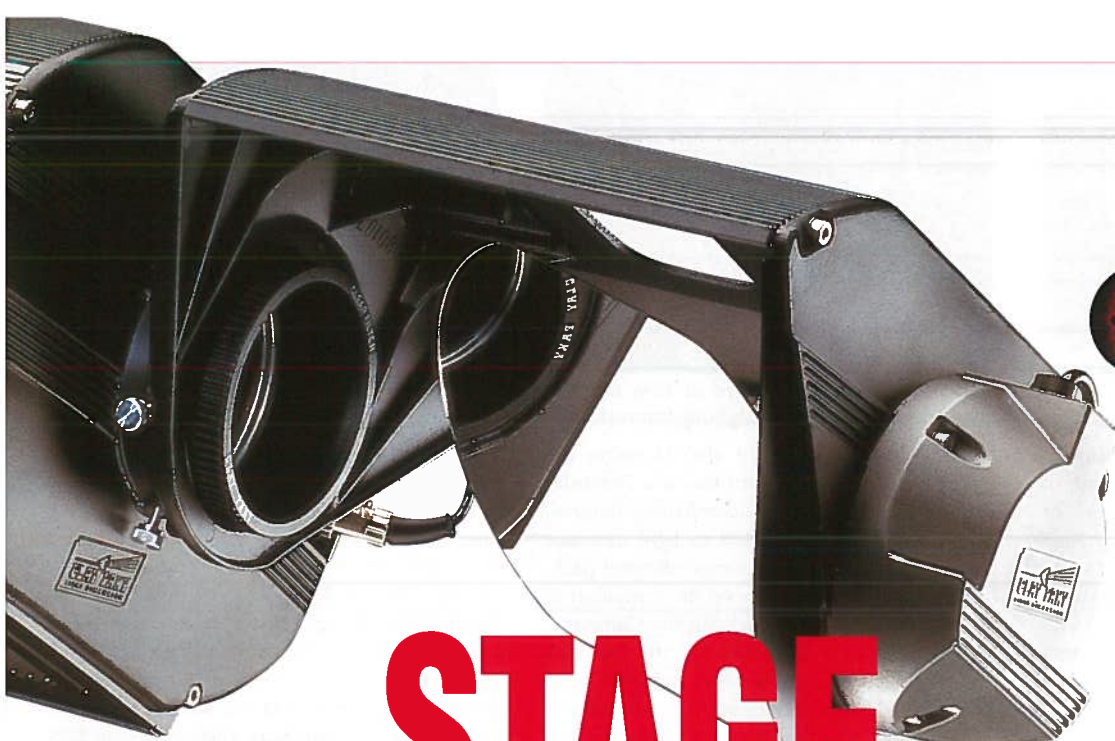


of any colour you can imagine, thanks to the **RGB colour mixing** system and to the special frost filters including the exclusive **Clay Paky "frou effect"**. Want to repeat a particular graphic effect on several luminaires?

No problem - Stage Scan features a **rotating prism indexing** system in addition to gobo wheel indexing.

Then there's the **independent access to the effects section** that allows you to change gobos, etc. even when the lamp is on, without burning





THE STAGE

your fingers or getting dazzled. That's just one of the details that make Stage Scan particularly suitable for professional applications.

Further examples include: **easy access to the electronics**, mounted on the inside of the conveniently hinged back cover; conventional fuses replaced with

the more efficient and safer **circuit breaker**; totally simple **mains voltage/frequency changeover** system, making Stage Scan fully compatible with all world electricity grid standards. Noise? Hush! - every Stage Scan luminaire features a carefully designed **silencing system** that will meet the tacit approval of even the most attentive audience. So if you're into stage lighting, you've probably realised by now that Stage Scan has absolutely top-level credentials - just take a glance down this features checklist:

- HMI 1200 lamp, 110,000 Lumen, for uniform color temperature and extended life;
- Hot-restrike igniter;
- Gobo unit with two separate wheels controlled independently or in combination;
- 4 M-size metal gobos - static position and interchangeable;
- 4 interchangeable rotating gobos (indexed positioning), including two dichroic glass gobos;
- 10 additional gobos supplied as standard in a special housing in the body;
- RGB colour mixing with ultra-pure dichroic filters for an infinite range of colours;
- Special effects filters (bi-colour concentric beams, four colour beams, colour temperature conversion and ultra-violet);



- Three frost filters including the exclusive Clay Paky "fou effect";
- Multi Step Zoom (MSZ) for beam angles of 13°, 14,5°, 16°, 18°, 21° and 25°;
- Electronic focus;
- Independent access to the effects, to the lamp and to the electronics sections;
- Input signals protected against accidental application of mains voltage;
- Circuit breaker replacing fuses;
- Voltage/frequency changeover system;
- 16 control channels plus one optional channel for the remote lamp on/off;
- Self-test routine for diagnostics;
- Re-calibration possible from the control desk;
- Compatible with the most widely used digital control signals: DMX 512, RS 232 (PMX).



Clay Paky offers a wide range of metallic, photographic and dichroic gobos. The fascinating catalogue full of new high-definition images satisfies the creative flights of fancy of even the most demanding lighting designers. Also your black-and-white or multicolour images can be turned into original Clay Paky gobos.

- Prism unit with four rotating prisms (indexed positioning) and one static prism;
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- 1-7 flash/sec strobe, 70 msec black-out time;

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PROFESSIONAL SHOW LIGHTING



L-R: Riccardo Pellegrini and Roberto Rota of Helvar srl with Adrian Greenwood of Electrosonic.

exhibiting with their German distributor, Contex, and showing a new budget range of flight cases available in a variety of colours, or in patterns almost as exotic as the young Italian poseurs who seemed to be constantly streaming past the stand. Nearby, **Abstract Design to Light** were showing a smart new VR8 low-budget scanner aimed at the small venue and mobile markets, available in a range of colours. The company also added to their control range with a new 64-channel controller.

Both **Doughty Engineering** and **M&M** were exhibiting with Italian distributor Decima srl, who were also representing the likes of Selecon, Transtechnik and Great American Market. **Le Maître** joined their Italian distributor Sangalli and showed their G Range ('intelligent smoke') products. Also on show were the company's new range of Pro Stage II pyrotechnics.

La Novalight introduced the Scenery lighting effect aimed primarily at stage and studio applications. The Scenery produces a 157.5 degree spray of eight light beams from a 1200W discharge lamp, with blackout shutter and four-colour changing system for each beam. Up to eight units can be synchronised from the company's own 0-10V controller, and a DMX512 adapter is optional. A drop-down assembly provides easy access to the lamp housing.

German laser display specialist **Tarm Showlaser GmbH** were showing the capabilities of their comprehensive Vario range of laser systems, for the first time using the Purelight Star II 5W from Coherent and Spectra-Physics' 12W Chroma 10 lasers with the system, all controlled via an ASCOM 3D workstation.

Nu-Light were showing their latest range of budget lighting effects, the Mini/MIDI Scan and the ProScan, which also has its own dedicated controller. They were joined on stand by British company **Smoke Effects**, manufacturers of a range of very small-scale smoke machines, whose first outing to Rimini was successful despite being marred initially by freight problems. These very cute products are being distributed in the UK by White Light.

Ryger's Defender range of lighting effects, which previously operated on the company's own RMX protocol, has now been fully refurbished to emerge as the Defender DMX. The four available options in the range all come with 10 colours with gobos and a choice of two 250W halogen lamps: A1/259 ELC, a powerful photographic projection lamp with its own dichroic reflector and the slightly less bright, but longer life, M33. The exterior of the units has also been restyled in a rugged black finish which makes them suitable for mobile or



Familiar faces: Freddy Lloyd of Zero 88 (left) with Hermann Sorger of Lighting Innovation.

touring use. Ryger were also showing the PPC400 DMX controller for the new Defender units or any other DMX compatible fixtures, and the M2L PRO, a MIDI to light interface including 8 x 5amps per channel dimmer pack.

Lite Structures announced the formation of a new division, the Litedeck Staging Company, which will be responsible for the Litedeck range. Adrian Brooks, another exhibitor who praised the level of serious international visitors at SIB, also revealed that the company are supplying a permanent two-floor Astralite structure to Disney's 'Tomorrowland' in Anaheim, California. The structure will form the centre of an attraction based on evolving technology called 'Innoventions'.

Owl Video Systems joined **Seleco**, who provided a striking display of a side-mirrored stack of video screens - an idea introduced by Owl's David Juby. New from Seleco was the HT400 video projector which has been voted Best Video Projector of 1997 by Home Cinema Choice magazine. Also from Seleco was a new video cube, the SRP41C, which can take VGA, SVGA, graphics and composite video sources. Designed and developed by Owl in the UK, the other new introduction on show was a 2x2 screen module called the Compact 440, which consists of four 40" screens and can be multiplied up to a 4x4 configuration. A 4 x 52" screen version will soon be available.

Studio Due added to their range of moving light effects with the Live Pro 1200 yoke-mounted spot, the result of two years R&D. Three different versions of this DM fixture are available, numero uno on the list being the 9701, which features two remotely selectable optical systems (12 degrees and 18 degrees), CMY colour mixing, prism and frost, wash frost and rotating gobos. Electronic ballast, vertical mounting bracket and flight case are optional.

Griven introduced a number of new lighting effects including the Colorway, a DMX controlled CMY colour mixing zoom fresnel with frost filter, available as 1200W or 700W lamp versions. The Jump contains a 575 or 1200W HMI lamp source and has 12 motorised mirrors, six with dichroic coating. A range of gobos are also included to vary the beam effects. Also for the discotheque market, the Spada lighting effect produces a single white beam (colour filters can be added) which is sound activated via an inbuilt mic.

Programmi E Sistemi Luce introduced two new budget followspots (1000W and 575W) for the theatre market and also added to their range with a new liquid light effect. Another new followspot came from **FAL**, who introduced the Starlight, which can be controlled remotely via DMX. Eight colours plus blackout are easily selectable from the



Mark Ravenhill (left) and Mike Falconer of AC Lighting.

control panel, while iris, dimmer and strobe are accessible via slider controls.

As mentioned above, **FAL** were also showing the Medusa, a 4kW or 2.5kW HMI outdoor luminaire aimed at nightclub roofs across the world. The Medusa projects over 50 light beams into the night sky or, in the case of the model on show at the top of the FAL stand, all over the ceiling of the Fiera. Other developments from **FAL** include redesigns of their Roulette 1200, Scan 1200 and Scan 575 effects and the pinnacle to date of the Proscan range, the comprehensively featured Proscan X.

Total Fabrications teamed up with **FAL** this year to make their first appearance as exhibitor at Rimini. The impressive 300sq.m, two-storey stand, which played host to Paul Dodd's excellent (as ever) lightshow, was custom-designed and built by Total Fabs and also housed **Laser Innovations**, who contributed their own special expertise to the **FAL** lightshow in the shape of the NATScan effects head.

German manufacturer **JB Lighting** were showing their latest addition to their VaryScan range, the VS5. This scanner utilises a 1200W HMI lamp and includes a range of effects, although perhaps the best advertisement of the fixture came with its participation in the hourly extravaganza presented by German laser display specialist **Lobo**, which was once again one of the major crowd-pullers of the show.

ShowCAD were once again ensconced on the stand of Italian lighting manufacturer Sagitter, and the company's Rowland Hughes was able to report a very busy spell for the lighting design package, despite what he feels to be some rather flattering singling-out from an opposition package! No less than eight ShowCAD systems are currently in use at a casino in Melbourne, Australia, through Light Moves. The cruise liner market is also doing rather well, with a number of projects forthcoming including Royal Caribbean's Grandeur of the Seas, while closer to home, P.A. Installations are using the system at a number of Warner Bros sites.

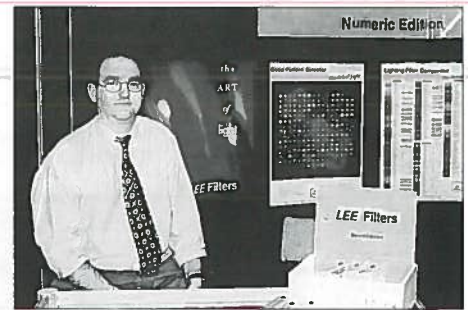
Sagitter themselves introduced several new products, including the Mask Color Zoom which combines subtractive colour mixing with the power of the 1200 MSR lamp, frost, remote zoom (14° to 30°), focus, iris and shutter. High quality optics deliver an impressively even field. Sagitter's Stefano Previtali made it very clear that the company's major concern was to achieve high quality output from all of their units by investing in the best electronic and optical engineering available. A new version of the established Infinity 1200 scanner is the Infinity MSZ (multi-step zoom), which can achieve variable beam apertures (10, 12, 14 and



L-R: Axel Gersdorf of LLV and Thorsten Pape of Comtex with Dave Harris of 5 Star Cases.



Mike Earnshaw (left) and Claire Adams (right) of Technotronics with Denis Bramhall (second left) and John Jones of PCM.



Graham Merritt of Lee Filters, who were exhibiting their Colour Magic range.



Carol Chevillat of MGC (right) with J. Correia Neves (left) and Jorge Nogueira of NAN.



The PLASA exhibitor group.



Augusto Andraghetti of Spotlight (left) pictured with ADB's Lucien Nieuwenhuysen.

16 degrees) and uses improved electronics to produce faster, cleaner responses. Also new from Sagitter, the Infinity Live Zoom 1200 can achieve 16-28 degree aperture variation, and again includes the company's improved electronics and optics for some very smooth, clean features. The fact that the Sagitter stand had the only grey projection surface at the show says something about the high output of these 1200W (HMI or MSR) luminaires.

The stand of Italian lighting manufacturer **Coef** was one of the most attractive at the show, with the company's Performance 1200 scanners demonstrating their capabilities. The other place that these fixtures were to be found at the show was on the **Lamba** stand, setting for the launch of the WinCommander lighting control package. The Windows 95 based DMX controller, developed for Lamba by HSL, offers 32,000 simultaneous 64-step chases, a comprehensive device database. Lamba's Gareth Collyer reported that a great deal of

interest had been shown following the launch.

Spotlight have adapted their theatre lighting know-how to flesh out their range of architectural mini-spots, which now includes Mini-Fresnel, Mini-PC and Mini-Profile models. Also on show were their range of motorised yoke-mountings designed for a wide range of theatrical luminaires.

Aimed at the display and leisure markets is **Geni Electronics'** new Ultima-2 projector, which uses an HSD 200 lamp and can project rotating gobos and slides. The modular design allows for a range of options and accessories, including a moving mirror head. Also from Geni is the Stratus 5X scanner which boasts a wide range of features including nine dichroic colours plus white, five replaceable bi-directional rotating gobos, four prisms and 3700K colour correction filter.

New effects from **Lampo** included the Eolo, a small sound-activated scanner, the Mover, a yoke mounted effect with a range of colours

and gobos, and the Columbus, a comprehensively featured mid-size scanner available with HMI 575 or MSR 1200 lamps.

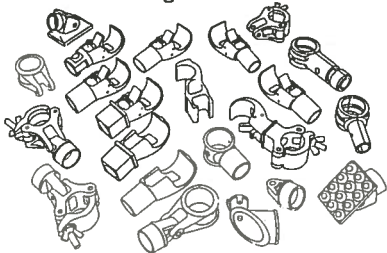
TAS introduced several new products including the Colore Fresnel, which boasts nine interchangeable dichroic colours, in-built dimmer, a 2,000 hour MSD 250 lamp with very low power consumption and high output.

SGM Elettronica introduced enhanced versions of their Colorlab colour changer and Galileo II scanner and also announced a forthcoming range of lighting control consoles to cater for a wide range of applications, more details of which will be available at a later date.

Finally, **Gemini**, who were exhibiting at SIB with MPI Italy, have introduced a new range of lighting effects (under the brand name of Lyte Quest) and one product in particular must be making other manufacturers of yoke-mounted moving lights kick themselves very hard. Why has it taken so long for someone to come up with the name *Motorhead*?

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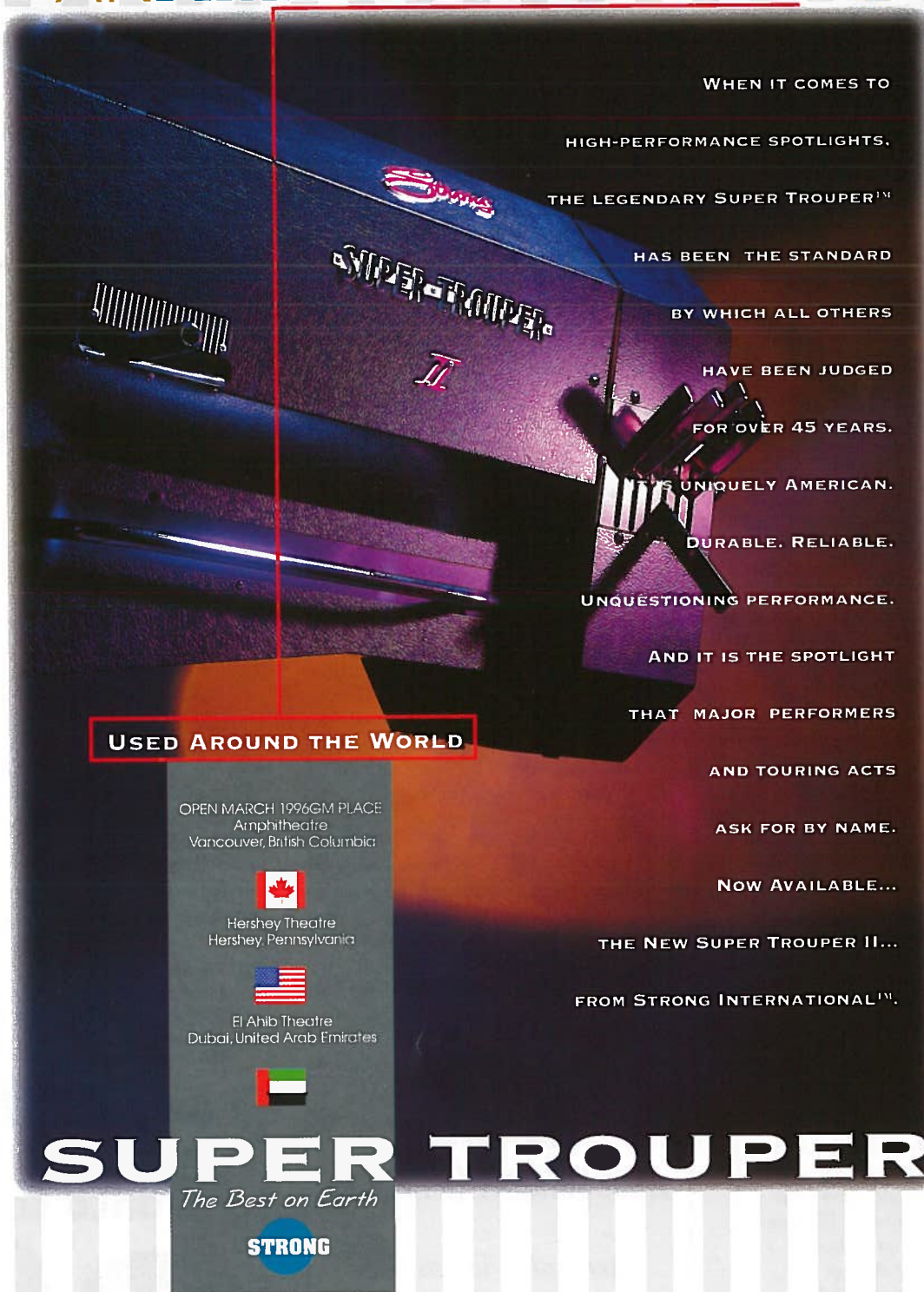
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CULTURE CLUB

John Offord keeps pace with the creative forum of designers at Hong Kong-based Sixth Sense

There has been much speculation in the media as to what will happen in Hong Kong when it is handed over to the Chinese at midnight on June 30th. The death of Deng Xiao Ping in February, the Chinese leader widely held to offer at least some measure of stability, has done little to sustain confidence and the population now faces an increasingly uncertain future. With all eyes focused on Asia, one company in particular will relish the opportunities such close scrutiny provides, and ride on through the change-over.

Sixth Sense is a new creative company set up by RMA executive creative director Nick Hamilton. Unlike other agencies, it is fighting shy of mainstream approaches in favour of a more intuitive approach to the field of retail and leisure design - hence the name. According to Hamilton, its genesis heralds "a new concept in design consultancy" - and whilst this may be over-egging the pudding a little, Sixth Sense is clearly marking out its territory and with some justification.

It has the right pedigree: the company is a division of RMA Limited (which Nick Hamilton founded with partner David Young), an agency specialising in presence marketing and visual merchandising, itself a part of the McManus Group (New York) worldwide network of communications companies which includes DMB&B Advertising. Like all offspring of successful parents, Sixth Sense shows a certain sure-footedness and, despite its relative youth, can count amongst its clients British American Tobacco (BAT) and LG Electronics. The consultancy is currently engaged in projects across Vietnam, Taiwan, China and Hong Kong, principally in retail and leisure design.

This is not Campaign magazine, so why, you might ask, is a design consultancy featuring in the pages of L+SI? The answer is simple - Sixth Sense is one of the few agencies using the latest lighting, sound and AV technology to get the message across. We have already hinted at the potential of this company through a feature we ran in the January issue of L+SI on Planet Europa, a 500-capacity nightclub in Vietnam, where Sixth Sense were responsible for translating the marketing of BAT's 555 cigarette brand into the club culture.

That is just the tip of the iceberg as I found out during my recent visit to Hong Kong where I met with Nick Hamilton and his team at their offices in the Quarry Bay district to learn more about their unorthodox approach to marketing. Spending time here is a little heady, not just because the climate is so temperate, but



Above, the 10,000 capacity KK International Disco in Taiwan and below, Sixth Sense's Mark Leigh (left) and Nick Hamilton (right) flank programmer David Stewart.



because there's such a flow of creative energy between the members of the team that it's difficult not to be intoxicated by the atmosphere.

And here lies the key to this young design company - the skill base of its people - hand-picked specialists from all fields of design - graphics, multi-media, 3D animation, interior design, lighting, design and architecture. The fact that Nick Hamilton was prepared to take over a year to source the right individuals from around the world is a lesson in the meaning of the word 'meticulous'.

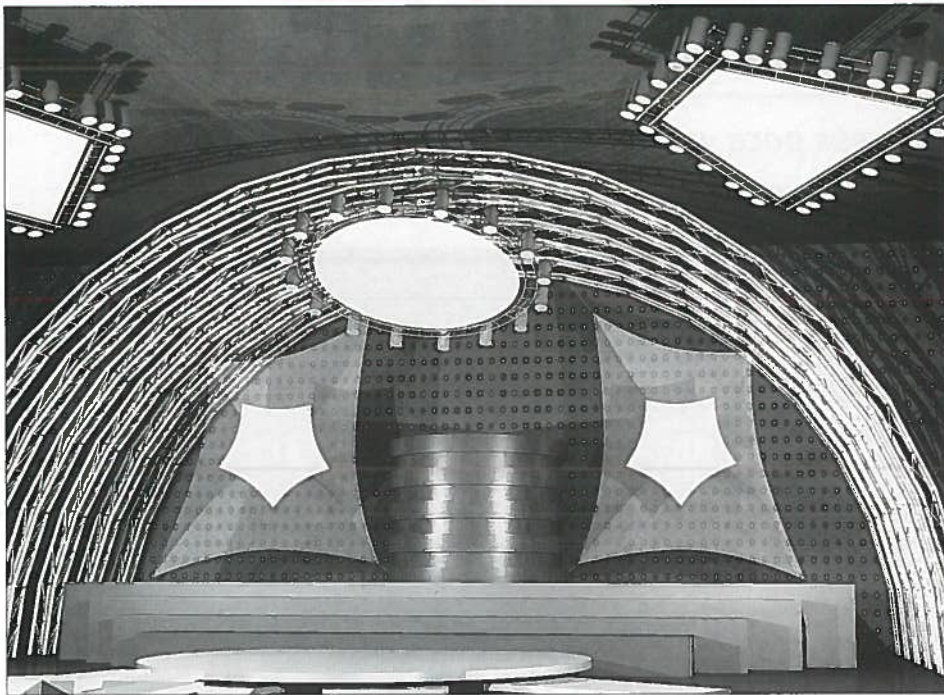
Hamilton himself is an experienced graphic designer known for his work in the cosmetic and fragrance industry, having worked extensively for Boots, Yardley and Leichner. He was also responsible for the design and development across Europe of retail

shop-in-shop concepts for Clarins and Ralph Lauren. Like Hamilton, Justin Williams, the senior creative designer, cut his teeth in the London advertising world working on print campaigns for clients including Philips, Parkway and Berol.

Quentin Reidford, the design director better known simply as 'Q', is a qualified architect who has specialised in retail design, whilst Craig Bee, the graphic design director has been a long term collaborator with Nick Hamilton specialising in 3D visualisation and computer graphic design.

Senior creative designer 'Sharkey' is another who has a foot in the architectural camp, but has extended this to corporate graphics and digital imagery, whilst multi-media director Steven Lau epitomises the new breed of young Chinese people currently bringing their western experience back to the east. Senior project manager Akin So is a designer who has worked extensively in China, whilst Mark Leigh, the man formerly behind Appledore, brings a wealth of experience in lighting and sound for architecture and retail projects to the company.

Gary Caldwell who trained in product design is another individual not shy of technology, being a shining light in 3D digital imagery. Add to this the talents of graphic designers Susanna



3D rendering of the KK International taken from the quick time VR produced of the interior showing the screen detail for the stage and right, some of the custom metal gobos designed for the project.

Yu and Stella Garrill, interior architect Siommon Paddison and project co-ordinator Hugh Seaton and you have a very impressive line-up of young talent.

There's clearly much give and take between members of the team and crucially a willingness to share ideas; in truth, if there wasn't, the very carefully constructed edifice would come tumbling down. Sixth Sense are in the business of selling people ideas and they do it very well. In the west, visual merchandising strategies have already become an important ingredient within the marketing mix, but Hamilton feels that in Asia, where markets are still emerging, but less sophisticated, scant regard is given to an area which will ultimately provide the foundation for a brand's retail image. The company intend to change all that and have signalled their intention to do so through their approach to the marketing of BAT's 555 brand.

Although 555 is the largest tobacco brand in Asia, it is not perceived to be 'trendy' and the company were presented with the task of marketing the brand to a much younger audience. Quite naturally they turned for an ally to the club market which offered the perfect conduit to young people. Having successfully launched the idea of the brand in the club world at Planet Europa it didn't require a great leap of imagination to transfer the same sort of principle across to Taiwan. As one might expect, Sixth Sense launched the concept on an appropriately grand scale. Together with BAT Taiwan, an arm of BAT and Bates London (the custodians of the brand), they integrated a total lighting programme and audio visual package into the 10,000 capacity KK International Disco in Taiwan.

It's worth reiterating at this point just how the nightclub market works in Asia. Unlike its western counterpart, a club in Asia cannot rely on revenue from the sale of alcohol to bankroll the upkeep and refurbishment of the club partly because so few Asians drink alcohol. Instead

the clubs have to depend largely on entrance fees and, increasingly, funding in the form of sponsorship from the corporate sector. As a result, an unusual triangle emerges of club owner, sponsor and design company, where the latter is called in to revitalise the interior of an existing club and must do so in a way that satisfies both clients - not an enviable role at the best of times.

With a club the size of Wembley Arena - the second largest in Asia - Sixth Sense clearly had their work cut out and so it fell to Mark Leigh to implement the team's collective vision. Using the already-installed Case desk, he set about the task of reprogramming, together with one of Martin Professional's top programmers David Stewart, all the existing lighting which included several hundred Par cans (these were regelled from a mix of primary colours to a more uniform look of blues and purples that tied in with BAT's corporate colours) and a small amount of Martin and Studio Due intelligent lighting. To this they added two Martin PAL 1200s and four Martin Pro 1220s (from Seapower Taiwan) and a pair of High End Cyberlight CXs (from Prosound Taiwan), together with two video projectors and a VCD player. To soften the look of the club, Leigh introduced a number of fabric screens designed by Sixth Sense and manufactured by Gerriets and to take full advantage of these, not only introduced further lighting at stage level, but reconfigured some Pars to provide screen washes.



In order to introduce a higher profile for BAT, the company retro-fitted the PALs and Cyberlights with a complete set of dichroic and metal custom gobos (the common theme once again being the solar system) designed by Sixth Sense and manufactured for them by DHA. The gobos are projected through 360 degrees across the series of web-like gauze screens so that the key 555 brand images are fed seamlessly with the club graphics. In addition to the scanner projections, the company have also generated in-house a video CD of 3D animations recorded as separate tracks, which follow through the same concept and are edited to various time beats - rave, house or dance music. The main focus of the club is the stage area where Sixth Sense have created two flower-shaped cones 9m x 13m either side of the central focus of the DJ with a star-shaped video projection screen suspended in front to add an extra dimension of depth.

As Hamilton points out, the intention was to combine the two elements of theatrical and nightclub lighting, interweaving static sets amongst the more traditional high impact club lighting. The challenge now is to keep one step ahead: the system at KK will be reprogrammed every three months by Sixth Sense and the company will create further video tracks of 3D animation, alongside new gobo images and there is also talk of a laser being added to add another visual dimension. As the pictures accompanying this article illustrate what Sixth Sense have created is a very live environment and have given a more three-dimensional feel to what was a relatively static rig, which not only satisfies the sponsors's criteria for a higher profile in the youth market, but also benefits the club owner who now has a much more dynamic club environment at his disposal.

What's interesting is that ideas which started from a marketing perspective were eventually translated to a technical one simply to give Sixth Sense the tools to do the job they wanted to do. And so developments went hand-in-hand with ideas and Mark Leigh is quick to acknowledge the support the company have received from the lighting and sound industry, in particular from Martin Professional and DHA who were very supportive and very receptive to the new initiatives thrown at them by Sixth Sense.

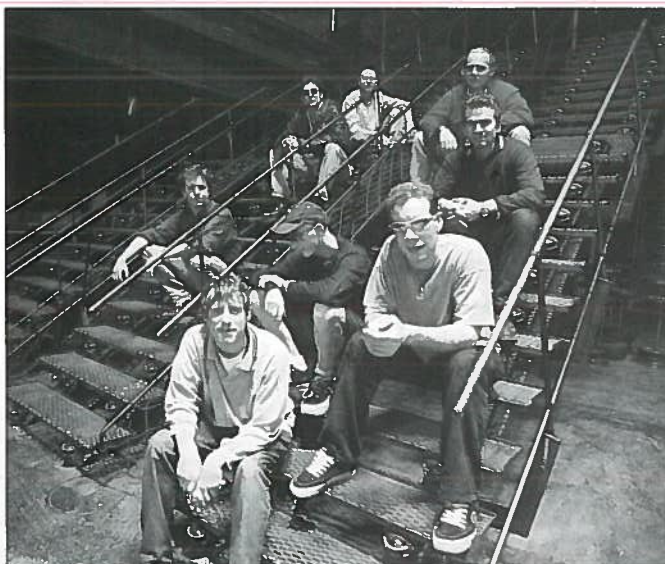
Where next? Well, the company is already exploring ways in which the 555 brand could reach a wider audience and would like to see some association with a music label or a move into the highly-hyped world of fashion. The important fact for Sixth Sense is that it must never stand still as Hamilton stresses: "I don't like taking a brief, I like creating a brief," and whilst the approach may alienate some it exerts a stronger pull on others who love the fact that the boundaries are being flexed and stressed all the time. Such boundary pushing is already on the cards and future plans include the creation of nightclub where the effects are not supplied by traditional lighting, but through video projection in what is, in reality, a complete AV-only environment. This should cause a few eyebrows to raise and send some manufacturers scuttling for cover, but if Sixth Sense can pull the idea together, it may well

have major implications for the future of the club industry.

Projects like the KK Disco demonstrate what Sixth Sense is capable of bringing to a project; they are by no means wholly representative of the range of the company's work, but they do illustrate the ever-strengthening ties between entertainment technology and the design industry.

In terms of their own profile, they are also looking at wider horizons. The company has just won the pitch to work with NBC Asia on a range of multi-media projects, bringing them a step closer to the television and film industry. They are also in the process of turning the tables on the UK consultancies, and their efforts to monopolise the Asian markets, by setting up a UK office in London. The London base will ease the pressure points on the Hong Kong operation, effectively allowing Sixth Sense to offer a 24-hour design service; the hope is that it will go on to win UK work, no doubt ruffling the feathers of a few UK consultancies who cream off the top Asian clients.

The company have also recently signed a joint venture agreement with an Australian design company and there are realistic expectations that a New York office may also be added to the letterhead. On the technical front, they have ambitions too. Most of today's lighting programmes only simulate lighting effects - not interiors - and the company are currently addressing this by combining WYSIWYG with either micro station PC software or programmes available on



Part of the Sixth Sense team (clockwise from left) - Hugh Seaton, Justin Williams, Mark Leigh, Nick Hamilton, David Stuart and Sharkey - are joined by KK DJs Ben O' Rourke (front) and Simon Gunnig (front

Macintosh to create a studio which is one of the first to fully integrate lighting as part of the conceptual design of an interior combining WYSIWYG with virtual reality 3D interiors.

I came away from my time with the team at Sixth Sense feeling very positive that the future of design is in safe hands and that the entertainment technology industry can only prosper by its association with designers of this ilk. Whilst Hamilton is clearly a driving force, the entire company is driven, not only by a creative attitude, but also a sense of

commitment to Asia and I don't think Nick Hamilton would mind me adding that he clearly likes to stir things up a bit. "We have found that in Asia, merchandising does not exist in the true sense. Advertising companies do not truly understand merchandising, yet it is the agencies that often take on this role in Asia."

Not a man to mince his words as you may have guessed, Hamilton has little time for some of the current operators in the market: "Hong Kong agencies and clients are inexperienced and it's time to think further than light boxes and neon signs." He would like to see much more innovative solutions being applied and believes that there are a few agencies beginning to take a more creative route to market: "Hong Kong designers are continually knocked by Europe for being second best. It's time for them to think again. Sixth Sense is working to challenge and develop ideas. There are only a few truly creative communities in the world - London, New York and San Francisco. It's time for a change and where better than Asia?"

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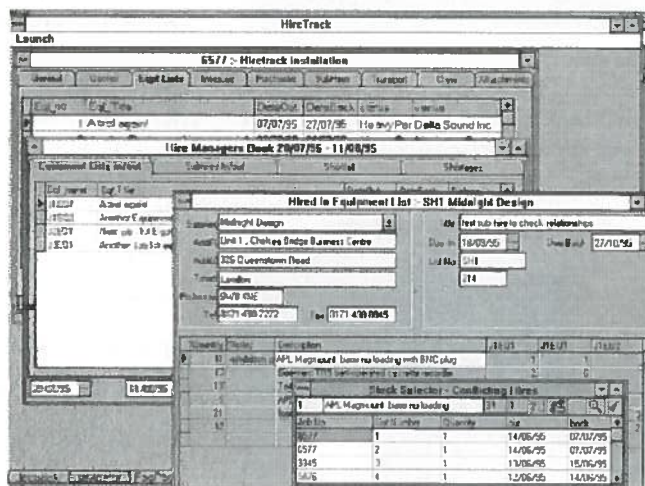
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MODELLING THE ANVIL

When The Anvil in Basingstoke needed a new audio solution, Bose took up the challenge with their Modeler and Auditorioner virtual sound technology.

Lee Baldock went to see and hear the result

It is perhaps unusual for a modern, multi-purpose auditorium to find itself urgently requiring a replacement sound system months before reaching its third birthday. However, a venue such as The Anvil in Basingstoke costs a fair packet to build and equip, and sometimes sound reinforcement can find itself at the vanguard of last minute cost-cutting measures. But when audiences increasingly complain of inadequate amplified sound, something needs to be done.

The Anvil is a beautifully designed, flexible space and hosts a wide range of performances, from orchestras to entertainers and comedians, to touring bands, to piano recitals and jazz, all the way up to full scale musical productions. Ian Trow, The Anvil's manager, explained the problem: "The venue opened in May 1994 and was designed largely as a concert hall. We had a mono sound system which was intended as a speech system, but it didn't cover the auditorium adequately. There were problems with comedians not being able to make themselves heard. The acoustics in The Anvil are superb - at least as good as, and probably better than, some other well known concert halls, but it just wasn't working with the system we had."

When technical manager Alan Jackson came to The Anvil last year, it was decided that action needed to be taken. "I began the process of contacting several companies and asking them to provide ideas on how to solve our problems, and that's where Bose came in. They stood out because they approached it as a full system, whereas the other companies just came in and said 'you need to add this box here and this box there.'"

But that was essentially what Jackson and his crew had been having to do anyway, and it had meant rigging different arrangements for almost every show. This was evidently not a suggestion they wanted to hear. What the solution from Bose offered, on the other hand, was a single, complete system which would cater for all of the Anvil's requirements. And what's more, the proof of this could be demonstrated, prior to installation and under absolute guarantee of satisfaction, with the aid of the company's Modeler and Auditorioner systems.

Jackson continues: "Bose modelled the auditorium and offered us a complete audio solution that covered every configuration, from an orchestra to speech, or back to the choir stalls behind the movable proscenium, which nobody else could really think of a solution for. Other companies had really only come up with proscenium format solutions, but more often than not we don't use the proscenium format."

What Bose offered was a system which was as flexible as the auditorium itself. For a space such as The Anvil which can convert to any one



The Anvil auditorium in proscenium format.

of five or six major formats, this was naturally an attractive proposition, made all the more attractive by its accompanying money-back guarantee. Unsurprisingly, Bose were asked to proceed with the modelling project through to the Auditorioner presentation.

Tom Simpson, one of Bose's certified Modeler users, undertook the 3D modelling of

"Bearing in mind that they knew their own auditorium, they were satisfied that this was The Anvil they were listening to."

the auditorium. He explained the process: "We have a step-by-step approach to designing a system. We look at the acoustic of a space and take reverberation time measurements using proprietary technology. We then go away and, using the blueprints, photographs, our acoustic measurements and any other information we have managed to get from the site, we create a three dimensional room model in our Modeler application. We are then able to place the speakers in that model, listen to the results and come up with a suitable layout for the space."

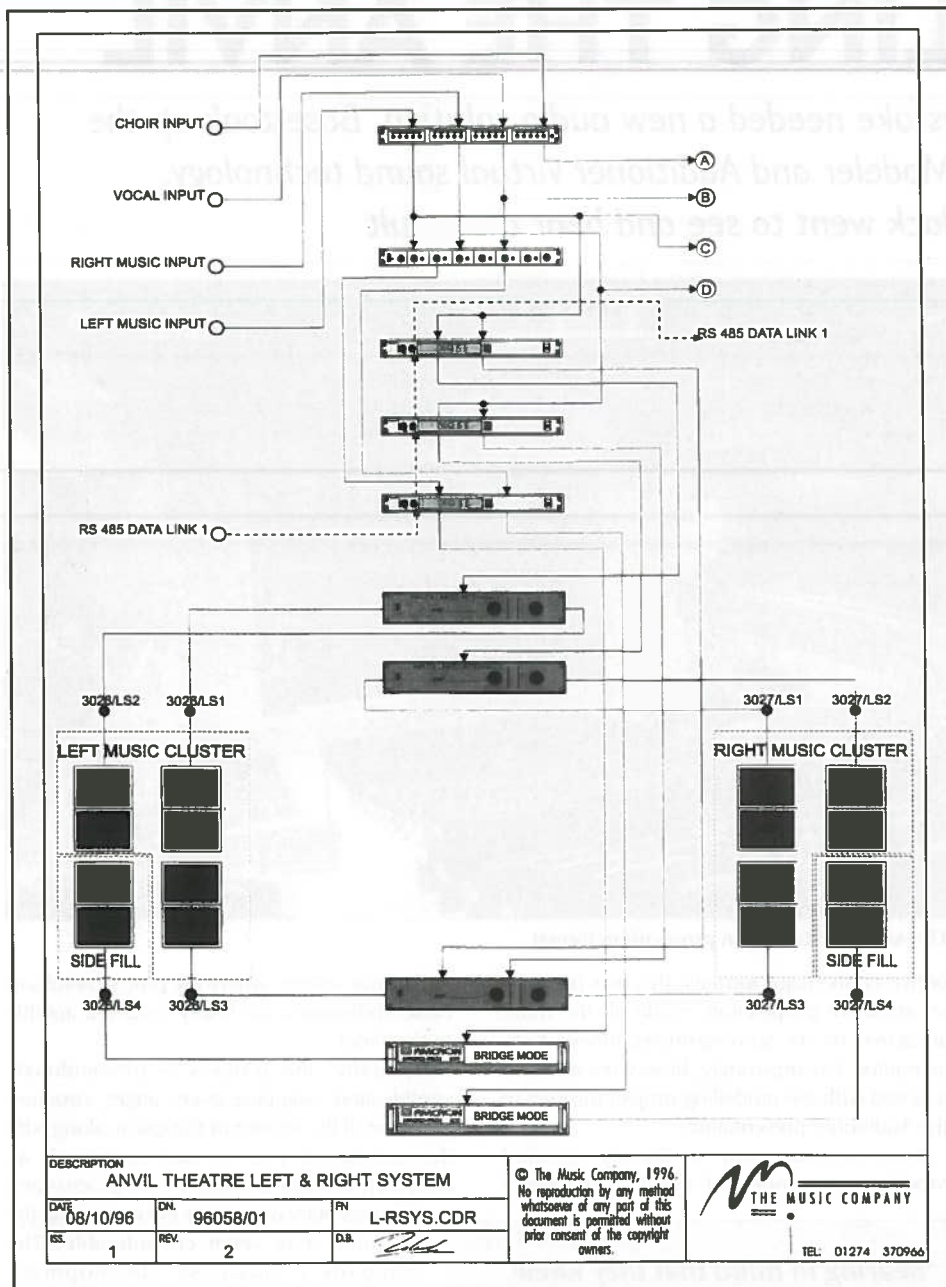
Once the virtual speakers are virtually rigged, Simpson then runs a series of acoustical tests within Modeler which demonstrates the coverage patterns. This allows the operators of the system to predict where potential problems may occur. Once the optimum system has been arranged, a number of listening positions are specified within the model and a series of filters are then created and transferred through to the

Auditioner system, where the precise results of these endeavours are finally rendered audible to the client.

Naturally, the process is tremendously complicated. Mapping every angle, structure and facet of the interior of the space, along with the reverberant time of each surface, is an extremely intricate and drawn-out process and the possibility of a minor error affecting the outcome may seem considerable. The company's business development executive, John Sabell, explained how the work of each design team is backed up by the wider Bose operation: "Every single design carried out by one of our teams has to be sent to certain key people within the organisation to ensure that the design is the best solution."

This works through an e-mail network which allows all of their 50+ certified Modeler designers to place their models into a central E-mailbox. Any of the other designers can call it up and see the project plans, the designer's notes and details of any particular problems, then give their feedback. Every design that Bose carry out under guarantee is backed up in this way by several different designers to ensure its accuracy. The advantages of such a thorough system are manifold, not least the uncovering of problems that may otherwise have gone unnoticed.

"To protect sight-lines, we had to keep the clusters high and the model showed that this caused some reflection from the rear wall," Simpson explained. "If we had been working the old way, we would not necessarily have recognised the amount of reflection the system was giving. So we were able to show Alan that some acoustic treatment would be necessary."

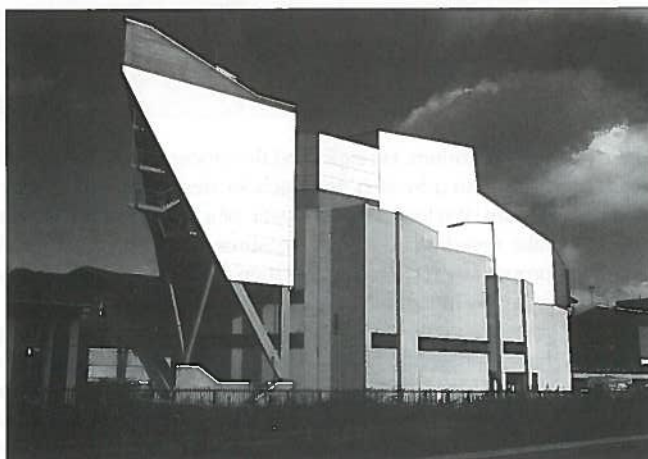


The Music Company's diagram showing the left and right music clusters.

The beauty of the Auditorioner technology is that we can listen around and try so many different things without even running a cable."

When the Auditorioner presentation was given to Jackson and The Anvil's executives, Bose suggested a suitable treatment for the rear wall - a simple drape. The results that the Modeler had given Bose tied in precisely with what Jackson and the technical staff already knew about the particular characteristics of their auditorium. As John Sabell recounts, the listeners were convinced that what they were hearing through Auditorioner was their theatre. "Bearing in mind that they knew their own auditorium, they were satisfied that this was The Anvil they were listening to."

So, with everyone happy, it was time to appoint the contractor. The Music Company from Bradford had seen a demonstration of the system for First Leisure back in January 1995, and so were familiar with Bose and the capabilities of the Modeler. Their tender was



The distinctive exterior of The Anvil, Basingstoke.

accepted by The Anvil, which was now ready for its new system. Miles Marsden, director of The Music Company, explained how the relationship with Bose came about: "The first work we did with the Modeler was in Blackpool at the Winter Gardens (see L+SI February 1996) and we were definitely impressed with the interface with supposed technology to

reality. As a tool, it answers so many questions, long before you get to the point of rigging - life becomes a lot easier. We don't have to leave contingencies in our schedule for 'what ifs', so it does have a great advantage."

The speaker configuration consists of a centre flown cluster, left and right music clusters with side fills and choir stalls behind the pros. The central cluster contains four Bose 502B Bass Array units, positioned end to end and facing directly down over the forestage area. This is the first UK installation of this particular array configuration. The units are based on proprietary technology that no-one at Bose particularly wants to discuss as yet, but they have the effect of 'steering' the bottom end out and away from the stage and into the auditorium.

Either side of these units are the central vocal clusters, consisting of a pair each of Bose Panaray LT (long throw) 4402s and 9702s. The left and right music clusters consist of two 4402s and a 9702, with another 9702 positioned left and right for side fills. The walls either side of the movable pros are hinged and can swing back and out to open onto the choir stalls.

For performances where this area is utilised, two painted-out mono 402s are positioned on the hinged walls, with a further two in the stalls behind the pros. A Soundcraft Venue II desk front-of-house looks after the mixing with outboard equipment from Denon (DN200F double CD), Tascam 122 Mk II cassette), Yamaha (SPX990) and Rane (ME60 two-channel GEQ). Equalisation is from Yamaha DEQ5 and DEQ5E units; amplification is from a mixture of Bose and Amcron amps and the system is time-aligned using Yamaha D2040 digital channel dividers.

Marsden continues: "Obviously you can blend whatever mixture of vocals and music you want, depending on the performance. In some cases you will have strict vocal centre, music left and right, but you can also mix and match, and bleed a percentage of certain signals - whichever way around you want it."

Alan Jackson has certainly been impressed by the job that Bose have done at The Anvil. Their involvement with the project, he told me, has been total, from the initial consultation, through the modelling process and Auditorioner demonstration, to close collaboration with The Music Company during the installation. "Bose really have been very supportive throughout the project. To be honest, what sets them apart from others we talked to was that they took the time to ask us what we wanted from the system. They didn't just come in and tell us what we wanted, they talked to us and listened and we're now very happy with the result."

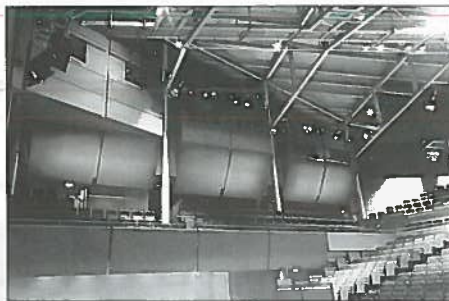
Which is something of an understatement. The enthusiasm shown by Alan Jackson and Ian Trow for both the new system and the technology with which it was achieved are almost palpable, and after the stresses of coping with, and making apologies for, the



Tom Simpson of Bose, Modeler operator for the Anvil project.

previous system, there is also a sense of relief. Jackson ably illustrates the feeling: "We are so pleased with it. Artistes that have used it have found it excellent. Some still come in and want to use their own systems because of their previous experience here, but we try and persuade them to try the new system. Some will bring their own stacks in and use ours to fill in the gaps. Then they come back later and hear it and wish they had just relied on the in-house system before, which is a very good thing."

And it does sound very good, throughout the auditorium. Of course, The Anvil is, as we have heard, a superb acoustic space, while the Blackpool Winter Gardens is a notoriously difficult one. So was this a relatively easy project for Bose and The Music Company? "I think it would be a bit glib to say it was easy," answers Marsden, "but I think what it means is that you can be even more confident of a superb result. If you are working in an acoustically friendly environment with no particular nuances to be overcome, an installation

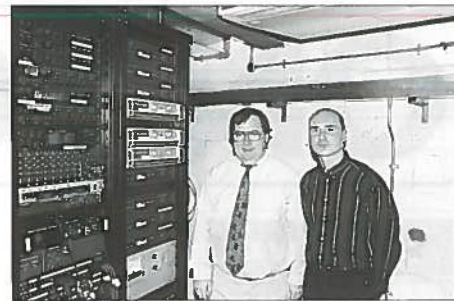


The Anvil's auditorium provided a complex and challenging space for the Bose Modeler.

becomes more straightforward. But work's never easy, is it?"

Point taken. But with Bose continuously developing their various proprietary technologies, it does look as though their work will become, shall we say, increasingly straightforward. The Auditorium itself is now entering a new phase of development, as Tom Simpson explains: "The original version of the Auditorium was an adaptation of one of our standard products because we wanted something we could start to listen to. The new Mk II version has been designed from the ground upwards, so everything we have learned over two or three years has been incorporated. We can now go a lot louder with it than before - we can reproduce about 118dB."

This development of the playback system has come largely from Bose's work on Noise Reduction Technology (NRT) which, incidentally, also illustrates the scope of the company's worldwide activities. NRT was originally developed for noise-cancelling



Alan Jackson (left) with The Music Company's Miles Marsden pictured in the amp room.

headsets for communication systems aboard NASA's space shuttles. Work for the military has included recreations of NRT operating inside a tank, and in order to properly demo the system, Bose needed an Auditorium that could reproduce the same kind of SPLs that would be experienced inside a tank in a battle situation. Doubtless Modeler too will undergo continuous enhancements.

I enquired whether, perhaps one day in the not-too-distant future, an advanced Modeler system will be able to produce the perfect audio solution for any virtual space, whether stadium, theatre or living room, *on its own*. No, says Simpson: "I think there's always got to be a designer, a human element. The input has got to be there from a designer to interpret everything the client wants and incorporate that into the model. There'll never come a time when you can just ask the computer to do the job for you."

You can almost sense the sigh of relief from the world's audio consultants.

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ILLUSTRATED BROCHURE AVAILABLE

ON TOUR

by STEVE MOLES

AND PRODUCTION NEWS

Jamiroquai

Sheffield City Hall

SD: Martin Harrison

LD: Phil Freeman

When I last saw this band in '94, they were opening for UB40 at the Don Valley Stadium. Flushed with the success of a meteoric rise to stardom the 'cat with a hat' (and I don't mean the character from Dr Zeuss) made a prat of himself by insulting the majority of the crowd as being 'too old'. Taking an instant dislike to them, I ignored most of their set. Four years later, a little older and a little wiser, Jay K now has his Lamborghini and is somewhat more accustomed to success. Music aside, Jay is no less outspoken, but his comments to the audience are more focused, political - yes, right on - definitely, but there was nothing offensive here, unless you disagree violently with the legalisation of marijuana. Altogether a more considered delivery.

SOUND

How you hear this band is fundamental to who they wish to be on-stage. Of the 11 musicians performing, most of the instruments are timeless - bass, guitar, drums, perc', didgeridoo, three horns and vox - but the keyboards are rooted in the seventies - Oberheim, Moog and Rhodes - and the only real departure from a seventies personality for the band's sound is the twin decks of Darren Gallea who spins in some acutely tight backing vocals off discs he's prepared himself. Rooted in the soul and funk of this era, the band have captured a niche in the dance market where punters, ever eager to swirl and sway, are given the chance to hear a group of musicians who really can play, as opposed to a bunch of technicians fiddling with samples and electronics.

FOH engineer Martin Harrison has been with Jamiroquai since they broke through four years ago. Starting on monitors (now taken by Chris Barton), he moved onto house sound and has enjoyed the delights of carrying touring production, a Turbo Flash/Flood system from Britannia Row, for the past two years. For the City Hall this is the biggest PA rig I've seen here since Mike and the Mechanics (14 cabs per side on the floor, six each in the air, mainly Flash with two subs flown), but as it transpires Harrison is very restrained: "It's a funny room," he noted, "absolutely perfect for orchestras. I believe I could get away with putting nothing more than vocals through the PA. The stage sound would transmit perfectly well."

His mix was a pleasure; low level but no lack of presence, and though he didn't impose his vox only limit upon himself, the music was nicely understated. And this despite Harrison's own protestations about "bass being all over the place for level" and "the single most difficult thing is Jay's voice, it's not a strong voice". Maybe it was just a good night and the band were well behaved. Yes Jay's voice is decidedly reedy, but his phrasing



A more considered approach from Jamiroquai.

is spot on which more than compensates. The bass was never offensive and the times when the piano came through with a bell-like sound - that light application of sustain on top so beloved of Stevie Wonder - well, just call me sentimental. Harrison mixes from a Midas XL3 with a 24 channel XL stretch to which he allocates his DAT, CD and effects (H3000, 990 and 900, PCM 80 and 70 and a 224X). It's the horn section that is the sweet spot for this band. "You don't really hear them on the album," said a chagrined Harrison, but he makes up for it in the live environment. Jay apparently writes all the horn parts and with some precision (which begs the question, why are they invisible on disc?). Brief, economical blasts give that tight sophistication to the music, the kind of stylistic signature that made the Brecker Brothers their fortunes.

LIGHTING

LD Phil Freeman has only recently taken on the job, just last October in fact, but is obviously having a whale of a time. "This is the best thing to hit me in years," said Freeman, and like a captain of industry with a young strumpet on his arm he looks rejuvenated as he bops away at the desk. It's just as well, for if you aren't moved by this music you couldn't possibly run the show. It's busy and demands action. Freeman has a fairly comprehensive rig from Negative Earth, not too large for a town hall stage, but plenty in it. Three cross stage trusses with a pair of tower legs laid on top in slight 'V' formation, between them hold 120 Pars, 32 ACLs (with 14 Color Faders), five Altman 703s and 12 Golden Scan HPEs, two of which are placed upright on the stage.

The back truss has a scenic drop produced by Back to Front, concealed behind a black gauze on a tab track. The image is an Alpine moonlit scene, a road snaking through the snow-capped mountainous, Jay's beloved Lamborghini the solitary vehicle upon it. It's rendered in Wildfire UV paint, hence the directional 400W Altman UV lamps, and when it makes it's appearance towards the end of the show gives a significant lift. But it's the movement Freeman puts into the show that really carries it. "I've put a lot of light on the band, something they remarked on when I first took over. In fact, I had to choose some darker colours to keep them happy. But it's the kind of music that

falls off the stage at you, you have to have things you can grab when it comes."

As such, Freeman sustains a lot of the momentum with classic rock and roll lighting, plenty of interplay between the many colour washes the Pars and Faders allow him, and keeps the HPEs for effects, backdrop work and sprays into the audience. Some of the more subtle touches - the three Source 4 profiles on the horns, the single blue Par directly above the drummer - might go unnoticed by the crowd so busy is the rest of the rig, but at their destination point they quietly lift the targeted musician as their playing rises and falls with the cadence of the music.

Freeman has created some nice simple touches with the Scans too; a lengthy instrumental intro' sees the gauze completely dappled in red dots, then as the vocals start the gobos shift into a concentrated pattern forming an arc of overlaid dots behind the drummer.

There's no stage set for this band. "They don't really need one," said Freeman, "because of the way they play." However, with a return to the arena circuit in late spring, he is already planning a more defined structure to the stage. I'm glad I overcame my prejudice; I even stayed for all the encores. This is a good-time band.

The Monkees

Sheffield Arena

SD: Todd Trapiccione

LD: Steve Hall

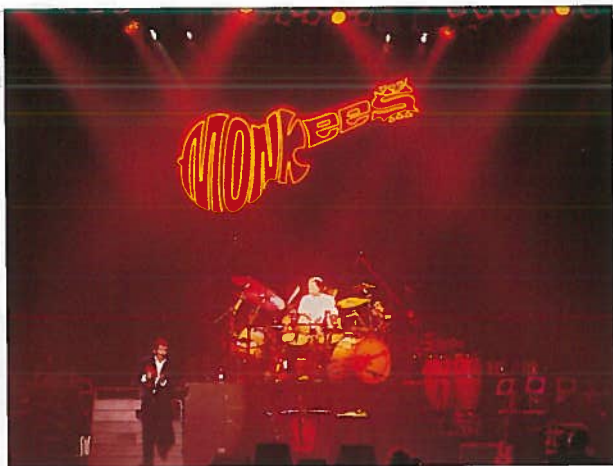
Relaxed and at ease thanks to their daily intake of Newspeak and Doublethink, they enter the Nostalgia Dome. Shuffling like automata they come in their thousands and - donning their rose-tinted spectacles - sit down for an evening with The Monkees. OK, so it's not 1984 and Orwell's futuristic nightmare has only partially been realised, but just why do large chunks of the populace come to see a band who, by their own admission, were a contrivance of television? It seems there are two reasons: the first is a deeply rooted desire to rekindle our lost youth, to re-live those care-free days when life was unencumbered by mortgages and looming monetary union. But that's all so much psychological claptrap, what we actually care about is the music. Was it really that good?

The Monkees back in the sixties eventually achieved a gravitas beyond the screen. It enabled them to twist the hapless TV exec's into permitting them writing and performing rights. Now 30 years later they've done almost the same thing, having released a collection of self-penned ditties, 'Justus', last November.

VIDEO

The setting is the Sheffield Arena, rigged for half house where perhaps 5,000 people wait in quiet anticipation. A simple box truss, 50' by 30' sits,

slightly raked, above the stage, while high to each side hang the Blink TV projection screens. I mention the screens because though it's been done before (notably Quo's last outing pre-Christmas), this is the first time I've seen them used as an integrated part of the show. Sound men have been doing something like this in arenas for years, turning up and plumbing into part of the house PA to give some coverage to the unfortunates sat in the 'nosebleed' seats. For this tour, Blink provide a PPU on the road (in this instance sub'ed in from Blitz Vision) and use of their permanently installed screens at whatever venues around the UK they're to be found.



The Monkees performing at the Sheffield Arena, complete with neon guitar logo.

The production directly employ Scott Russell a freelance video director. What could be simpler? No video crew spending all day to rig a pair of screens and align two Barcos, two less hotel rooms to pay for, less catering and bus space, and more space on the truck.

The production values here aren't skimmed - presentation is not cheap, simply realistic - but this idea wouldn't work for a big show like Tina Turner or AC/DC. Russell has two camera operators in the pit and a pair of minicams mounted on Mickey Dolenz' drum kit. The interplay between live image and fairly extensive amounts of contemporary recorded footage is not out of place, particularly when you consider that for most of the audience, TV is the place where these people became familiar with the band.

LIGHTING

For lighting designer Steve Hall, the video aspect does force him into almost constant use of lightly coloured or open white followspots, with a fairly modest rig this does limit potential. That said, the 200 Pars and 10 Goldenscan HPEs (all supplied by Negative Earth) are more than adequate for a stage show of this dimension. Hall elected to load most of the lamps on the upstage truss, including eight of the Scans ('subtly back-lit', reported the reviewer in *The Independent*), "... quite simply because there's plenty of front light from the followspots." He split the Pars into a six colour wash.

The band first appear in dark blue velvet suits, very Vegas, but not very good for lighting. Poor Steve Hall struggles to stop them looking like a set of disembodied heads with white shirt collars, while their suits quietly suck the light right off the stage. The best moments lighting-wise are when Hall drops to Scans only (he operates all lamps from an Avo Sapphire) and imposes strong beam patterns across the stage. It's the only look that's really able to compete and contrast well with the followspots, and he was not afraid to use it several times, exploiting beam, colour and shape facilities for variety. There's nine musicians on stage, including backing band, and too often there was an imperative to light them all. Hall also has a neon logo to contend with - a guitar with the band's name in it. Positioned centre back, the logo pumps out an inordinate amount of red light, but as the band's performance consists of lots of new songs we've never heard before, it's probably just as well they also insist we have this constant reminder of who it is we're watching.

SOUND

Like the lighting, the PA is a perfectly reputable system of Meyer from WigWam, and a fair bit of it for a small rigged presentation. Eight MSL3s per side, flown with UPAs rigged as down fills and a further pair of UPAs at the centre on the ground for the front few rows. I didn't count the number of 650s on the floor, but there was one occasion when it was quite clear there was enough low end because it rattled every bit of jewellery in the house. FOH engineer Todd Trapiccione mixes from a Yamaha PM4000, has the usual collection of compressors and gates, plus four SPX990s, two SPX1000s and an H3000, and there's plenty of vocal treatment for a band who aren't really that accomplished when it comes to singing. The elements of the PA are tuned for the room through three XTA GQ600 twin channel graphics (the delay is also XTA) and with Trapiccione being from the relaxed school of mixing - he doesn't feel obliged to constantly twiddle and fiddle - the system sounded sweet and steady.

Bryan Clements is on monitors (a Soundcraft SM24 and a rack full of TC 1128s) and gives the greatest insight to the band's performance. "Sound quality is important, of course," he said, "but it's the changes and cues that really matter to these guys. My job is to keep things on an even keel, to appear calm and in control when they may feel on the verge of panic." The band go through a fair range of changes in the 'send and receive' department - hand-held, boom mic, In-Ear, headphones - you name it, it's there at some point, and there's a nice big pair of KF850 speakers each side of stage to accommodate all this. Overall, the sound was like a comfy old cardigan - clear, defined, familiar like the CD player back home, and at a pleasantly geriatric 100dB peak. There were a couple of songs by Davey Jones when the reverb expanded into a curious sibilance at the top end that was ugly to say the least.

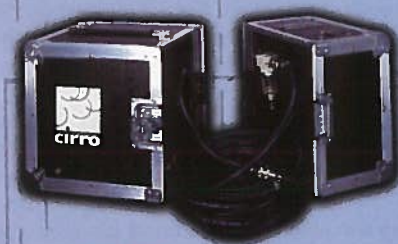
As a show it was too long. They were on-stage for 100 minutes, which would have been OK if, as Scott Russell said, "... they played all the old hits that the punters come to hear." But they didn't. Instead they performed a fair chunk of new material off the *Justus* album, and it must be said, with a certain manic desperation in their presentation. I suspect that as was the case 30 years ago, their insistence on trying to present themselves as a song-writing pop group, ethically laudable as that may be, will ultimately be their undoing. As even George Orwell knew, numbing people into insensitivity is ultimately self-defeating.

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ABTT ALLIANCE

The L+SI team report from the Royal Horticultural Halls, London



Ron Knell (left) and Jack Exell of Lighting Technology.

There seems to be an increasing polarisation of trade shows these days; some simply get larger and sweep all before them, whilst others remain content to go for containment. ABTT, of course, falls neatly into the latter category and although there have been times when talk turned to mergers with larger shows, it has managed to retain its independence in what is a very cut-throat market.

In many respects, shows like ABTT have an advantage over larger shows in that they provide the ideal meeting ground for like minds and offer people in this fast-moving industry a chance to step off the carousel for a few days and enjoy a really good conversation and not just deal in sound-bites - a rare commodity in these times. Let's face it, ABTT isn't so much about product as people. It has something of the feel of a private club about it, and is all the better for it.

One of the great features of ABTT is that it is a leveller of sorts in that major manufacturing companies like **Martin Professional**, whose predilection for large stands is well-known, are on the same size stand as everyone else. Martin's Ian Brown was joined at the show by Jem's sales manager Ian Latham, who reported continued interest in the Hydrosonic 2000 haze machine.



Derek Saunders and Snowy Johnson on the award-winning Pulsar stand.

M&M, fresh from the success of their recent Open Day at the New London Theatre, were joined by moving light training specialist Coral Cooper from MA Products, demonstrating some programming tricks with the aid of a Scancommander desk.

Multiform Lighting were showing a host of products from Sagitter, including the new Infinity Live, Super Prince and Mask Color Zoom along with the improved Infinity MSZ. Other products on stand included the DMX 202, a 2-channel DMX decoder and the Rakpac 4610 stage lighting dimmer pack. Another Italian manufacturer in evidence was **Teatro**, whose Versa-Disc range of effects were once again on the **Lighting Technology** stand, along with the LT's ranges of flicker effect candles, black light effects and the Limelight followspot.

Following on from last year's launch of the MSR conversion to an old 4kW HMI Fresnel lantern, **Ark Light** were showing further samples of MSR conversions including the Patt 765 followspot, along with their new range of barn doors. One of the key attractions on the **Cerebrum** stand was the Maris DMX-Pico, possibly the world's smallest DMX rigger's remote, and the Stinger show controller.

Harkness Hall's T60 9000 Integral Track Drive systems were on display, as well as a new



Glantre's Tom Rees (left), Susan Bowerbank and Derek Gilbert with Disney Magic.

material for fire curtains which the company are distributing in the UK - Zetex 1210-ZP. This non-asbestos material is produced from texturised silica-based yarns, and whilst softer than asbestos fabric it has five times the abrasion resistance.

The **DHA** stand demonstrated a new breed of gobo animation for a new breed of lantern. Designed around the ability of certain profile lanterns to accept two gobo holders, the latest Double Gate Animation development from the company prompted them to launch a new gobo holder at the show. The holder allows a second A-size gobo to be used in the ETC Source 4 lantern, along with certain others from the Robert Juliat range, the ADB Europe series and, with adaption, certain Strand and CCT lanterns.

ADB were showing products from the 1500 range, including the Vision 10 control desk and reported the recent sale of five of these to the BBC. Last year's award-winners **CCT**, were back with the enhanced Freedom range, now with two new variable beam lens tubes.

Having built a reputation as a world leader in on-board entertainment systems for the cruise line industry, **Glantre Engineering** were displaying a model of their latest ocean-going project, the Disney Magic, which is due to enter service in April next year. Also at the show were



Nigel Sadler (left) and Andrew Hurst of M&M with Coral Cooper of MA Products.



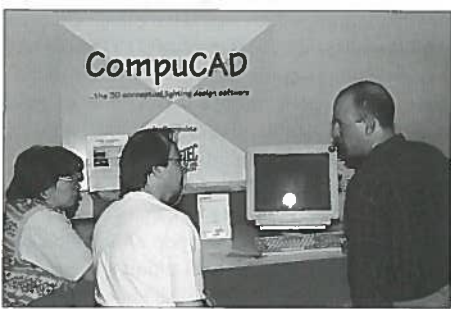
Wyatt Enever (left), Caroline Ferris and Mark Marsden-Smith of DHA Lighting.



Linda Gibbons and Trevor Singleton of Le Mark showing the new Blacktak tape.



David Edelstein (left) with Jason Barnes on the stand of Triple E.



LD Niv Sadeh demonstrating Compulite's CompuCAD lighting design software.



A Harkness trio of Doug Heather (left), Tony Griffiths (centre) and Rob Pickett.



ADB's Russ Evans (left) Paul Swansborough (centre) and Jackie Staines.

AJS, who not only notched up their most successful year ever last year, but are following the example set by Glantre, by making inroads into the cruise industry, with three installations for Airtours currently being looked after by a new division, AJS Projects.

In a move that will be welcomed by theatre and television technicians, **Le Mark** have developed Blacktak - a light mask foil. This black aluminium foil tape with a heat resistant adhesive can be used for killing light spill, creating shadow and adapting gobos.

The **Northern Light** stand boasted a range of their stage management desks, along with equipment from Crest, Klark Teknik and the latest products from Denon. From **Rosco** came Vivid FX, a new 13 colour fluorescent paint range, along with Horizon, a PC-based control programme, launched to great acclaim at LDI last November.

Having previewed it at PLASA, **Stagetec** were showing the Compulite Ovation 4D lighting console which is now in full production. Featuring 1536 channels of control, 512 channels of moving lights with four DMX outputs, it is ideal for the larger theatre or television studio and the first installation of the system was due to take place a week after the show at the Queens Theatre in Hornchurch. The company also had a second stand in the south annexe where demonstrations of the recently released CompuCAD software ran.

Since their last visit to ABTT and largely as a result of an increase in sales of stage curtains and associated equipment, **Trafalgar Lighting** have grown considerably forcing a move to larger premises.



Managing director Bob Dagger with Monica Arnott of Harlequin.

Strand were showing the latest addition to their GeniusPro range of memory lighting consoles. The 520 is a compact and robust 100 channel desk (extendable to 2,000 channels) aimed at the touring/rental market and small-to medium-sized theatres.

This was the first time that **Vari-Lite Europe** had exhibited at ABTT, and although they did show a small selection of products, the emphasis was very much on people with visitors to the stand having the opportunity to talk to the specialists on-hand.

The **White Light** stand was the scene for the announcement of the launch of a new company. Following expansion in the White Light service department, The Service Company - led by former Strand service engineer Antony Bridges - has been set up to take over White Light's service department. The separate company will specialise in offering technical support for theatres and their lighting control systems. Meanwhile, at the opposite end of the hall, **Zero 88** were showing the Sirius 250 lighting control console which was launched at PLASA last September.

AC Lighting and **Lee Filters**, both recently seen in Rimini (see report starting page 47) were again in evidence and seem to have become an established part of the ABTT mix. For AC it was another chance to air the new Starlite Mk5, whilst for Lee it was business as usual and judging by the level of interest shown in both stands, they should be now back in their offices with a small suitcase of business cards.

Scenic tracking systems were on show from both **Triple E** (Unitrack system) and **Stage Technologies** (TowTrack). The former have



Mike Smyth and Richie Rae on the stand of Northern Light.

recently appointed Automatic Devices Company as exclusive distributor for North America, Canada and Mexico. Rigging specialist **Unusual Rigging** were promoting their range of products and services.

Though ABTT traditionally attracts the lighting and service companies, over recent years, there has been a steady presence from audio companies and both **Marquee Audio** and **LMC Audio** took stands this year. Marquee were showing the latest speaker from Turbosound, the THL-2, a switchable bi-amp/passive three-way loudspeaker, along with BSS's new Opal series of signal processors.

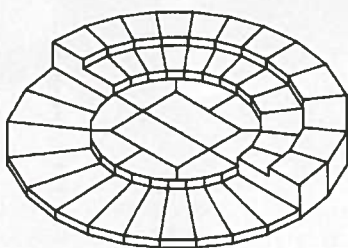
LMC Audio, meanwhile, were flying the Yamaha flag in the guise of the 02R mixing desk, among their wide range of products, and were also joined on stand by communication systems specialist **Metro Audio**.

Sennheiser have just recently been awarded the distribution of DAS speakers in the UK, but were concentrating at ABTT on their infra-red theatre equipment and radio mics whilst **Trantec** had the S5000 UHF series of radio mics on stand, now part and parcel of a large number of theatrical productions.

As with just about every other trade show, the awards are now a standard feature of the event and Best Stand award this year went to **Pulsar** for their 'graffiti wall' idea, a pertinent backdrop to the Masterpiece and Clay Paky demos, whilst Best Product went to Martin Professional for the PAL 1200.

Other exhibitors included the **R&G Group**, **Kave**, **Andolite**, **Varia Textiles**, **XTBA**, **Flint**, **J-Tech**, **Harlequin**, **Rope Assemblies**, **Audience Systems** and **Steeldeck**.

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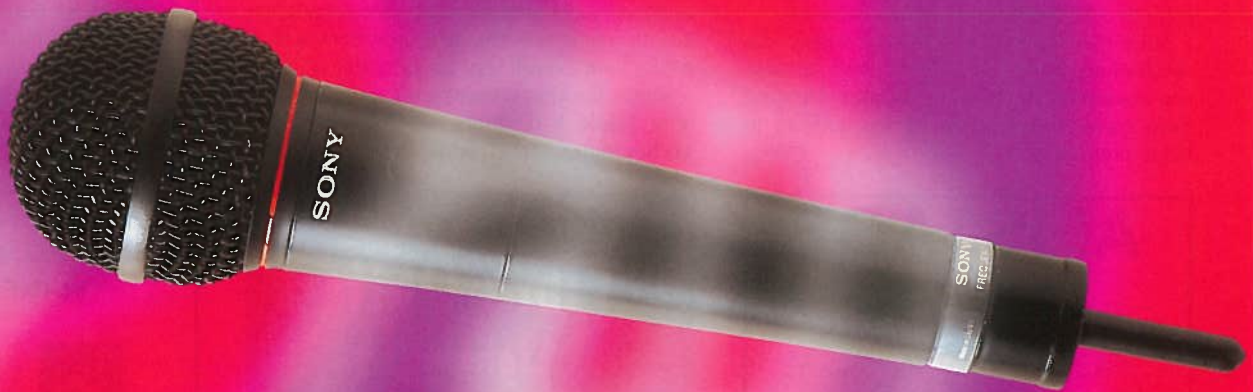
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LIGHT WASTE

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Above, LT Projects' light relief for Landschaftspark at Duisberg and a floodlit Tyseley incinerator plant in Birmingham, below.

Positioning a waste incinerator on the outskirts of Birmingham and then lighting it up to make it a focus of attention sounds akin to a teenager walking around with a big sign pointing out his chronic acne. The curiosity is that Tyseley is a working plant with a singular purpose and very industrial function, and not, we might suppose, a very attractive one at that. While we can find majesty and magic in the mighty halls of a steel mill there's little to fire the imagination in waste processing.

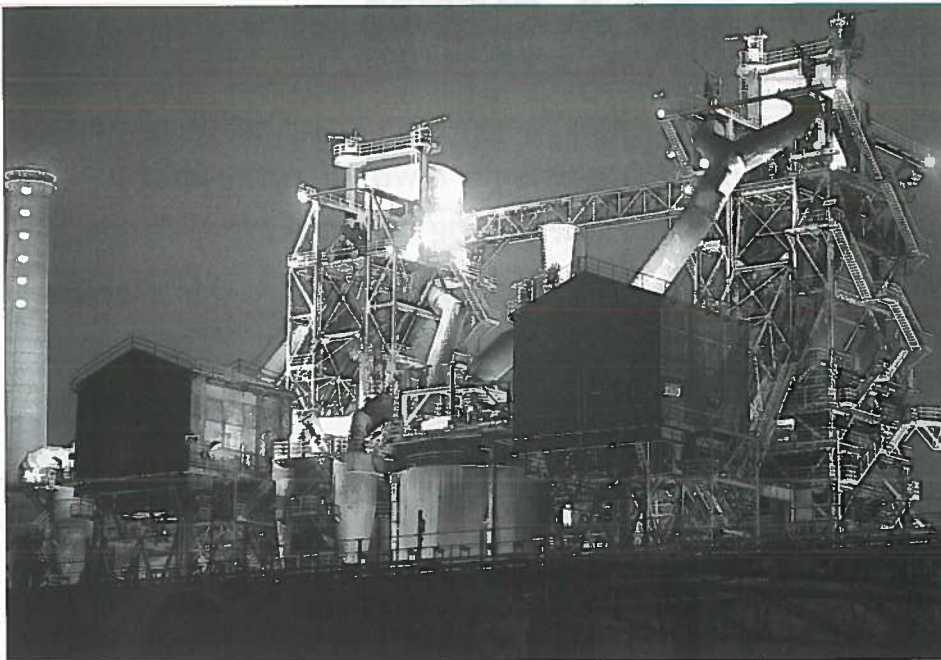
Thus for Martin Richman, who models himself a 'light and space artist', the Tyseley project was a very challenging encounter. Richman has freelanced in his chosen field since 1985 (he is currently represented by Dominic Berning Fine Art) having previously plied his trade across many disciplines stretching from rock and roll lighting with Hendrix and Iron Butterfly in the sixties, to theatrical lighting for productions such as 'Illuminatus', and 'Hitchhikers Guide To The Galaxy' in the seventies. A brief return to rock in the early eighties saw his name on set and light designs for talents as diverse as Chris de Burgh, Pink Floyd, Mike Oldfield and the Ramones, so it would be fair to say this man has



an ample chest of experience and influences to draw upon.

Richman was awarded the Tyseley project by Percent for Arts, run under the aegis of Birmingham City Council and supported by the

Public Arts Commissioning Agency. Essentially, the artistic enhancement of the plant was incorporated as a criteria of planning consent, forcing whatever contractor was awarded the construction job to take on this aspect as an



Above and opposite, further perspectives on Landschaftspark.

integrated part of the whole, rather than some expensive afterthought. Richman's imaginative concept draws largely upon lighting to create the desired result, although he has also embellished the buildings themselves with some paint treatment where necessary.

Before dealing with the lighting content and the challenges of its interface with industry, it's worth dispelling a few myths about waste incinerators. Designed, built and constructed by Halesowen-based Birwelco, the plant is nominally rated as a 30 Mega Watt incinerator. In simple terms, the plant processes a thousand tons of Birmingham City's household and domestic waste each day, reducing it to ash. A remarkably efficient means of disposal, the burning process not only reduces the sheer mass of waste to 24% of its original volume, but the burning process is self sustaining. Once ignited the furnace runs 24 hours a day and as a fuel uses only waste material. There's no added conventional fossil fuels to help maintain the burn, so the sizeable chunk of electricity produced (enough to run a community of 25,000 dwellings or Patrick Woodroffe's next Rolling Stones design) is effectively nett gain. It certainly beats digging a hole and sticking all those crisp packets in the ground. Naturally, the furnace requires a fairly sophisticated control system, the highly irregular fuel - releasing as it does all kinds of noxious and volatile gases - is maintained by injecting air from above, below and within the main burn area, a computer-controlled sensory system detecting the gaseous events occurring within the burn and mixing accordingly.

The point is that while we might imagine the plant to be a fairly hostile environment, completely unsuitable to the lighting and technology found in the entertainment world, it is in fact much less threatening, already playing host as it does to much high tech' equipment that is equal to, if not more powerful than, the stuff of our trade. LT Projects supported Richman in his work, contracting direct to Birwelco to specify, supply and install the equipment, but also acting as an interface between art and industry as it were, identifying

the lamps that would do what Richman wanted them to whilst allowing for the practical considerations of the job.

"There's a lot of work that artists in this field do," explained LT Projects director Bruce Kirk, "that has to be managed by the contractor. Where we have to put round pegs in square holes, so to speak. It requires a fair bit of hand-holding." It may not be in the cost-quote, but obviously the need to interpret conceptual ideas into something Birwelco can relate to is important, if a little time-consuming. A project of this nature - the lighting enhancement part that is - was totally alien to Birwelco, as a taciturn Mark James, Birwelco's purchasing manager for the project, admitted. "We were *persuaded* (his italics) to undertake the project, building in the artistic element. We didn't know how to integrate it, but it was an additional expense and we had to make up the balance."

Birwelco's on-site electrical engineer, Satia Soeyadiredja, was more enthusiastic: "Looking back it was well worth the effort. In fact, the allowance we had to make for the LT Projects installation didn't slow us down on the overall construction project at all. It was simply a matter of having power available for them in the right place."

Simon Cooper led the LT Projects team which installed eight Irideon AR500s, 200 metres of 100mm diameter light pipes (a sort of giant fibre optic device), a K2 projector and eight conventional floodlights around the buildings. The four light boxes on the Receiving Hall are the most prominent feature. Facing the nearby A45, the 50ft tall by 10ft wide boxes each contain a pair of AR500s which slowly fade through a progression of colours onto the perspex cladding of the box. One happy coincidence of the boxes is the fall off of intensity as the beams ascend (both AR500s are at the bottom) that gives the appearance of a secondary darker shade at the top, which from outside appears as an intentional two tone treatment.

The light-pipes, a stock 3M product intended for use as motorway safety lighting, are positioned vertically between the RSJs that

stand like soldiers around the Turbine Hall. The pipes are lined internally with a special film to aid light transmission. Remarkably efficient, a visible glow can be achieved with just a 12W torch light. In this instance however, LT Projects have fitted 200W MSD sources with Coemar TAS dichroic colour changers. The RSJs, painted red as part of Richman's design, are in turn bathed by the light of the tubes, either reflecting the glow or being colour neutral to what shines upon them allowing a range of moods to shroud the exterior.

The K2 projects a custom designed rotating square pattern gobo onto the huge perspex end wall of the Turbine Hall, where it interplay's with another of Richman's ideas, a design of concentric opaque and transparent perspex panels. The whole system was programmed up on a Pulsar Masterpiece, the DMX signal being transmitted through a proprietary armoured instrument cable made for the off-shore oil industry. For entirely logical reasons, the Masterpiece has now been replaced with a Masterpiece Replay unit and this is probably just as well, for when speaking to Peter Twist of Tyseley Waste Disposal Ltd who now manage the site he said: "Everybody here rather likes the lighting - in fact, I'd like to be trained to work it." OK, go on then, but give us a go with your furnace first!

This is not the first foray into industrial landscapes for Lighting Technology. They have already worked on many similar projects, including the tall order of illuminating Landschaftspark Duisburg-Nord. The difference here was that unlike Tyseley, this is not a working plant, but a redundant iron works in Meiderich, North Duisburg, which has been developed into a visitor attraction and leisure centre. Lighting for a leisure venue is a more understandable pursuit than lighting a waste incinerator, but the theme is still inescapably industrial.

The first hint of the potential of the project came when Uwe Giebeler, a business associate of the designer Jonathan Park, became head of presentation for the IBA, a German organisation concerned with the reclamation of former industrial properties. In 1993, he sought Park's involvement in a spectacular one-day opening event at Landschaftspark, which was pencilled in for September 1994.

Bruce Kirk and the team at LT Projects were then drafted in to implement Park's design to convert the rusting redundant ironworks into a modern-day lighting 'sculpture'. It became increasingly apparent that floodlighting would be the most appropriate vehicle and because the project was initially for a one-day event, the infrastructure dictated a non-permanent installation and hired-in equipment. As the project developed, both Jonathan Park and the team at LT Projects could see that the investment, both in time and money, would yield far better returns if the event was translated from a one-off to a week-long programme of events.

As it turned out, this was to be only a stepping-stone to a much bolder plan which was fuelled by the fact that the cost of the floodlighting and temporary lighting infrastructure would be increased only marginally if a permanent installation was to be

considered. Permanent discharge lamps are more expensive than the temporary elements, but they are, of course, longer lasting, very durable and have a low power consumption - ideal qualifications for the task to hand. Faced with such an attractive proposition, IBA could hardly refuse and gave the go-ahead to the permanent illumination of Landschaftspark.

Because finance was being drawn from a number of sources, the various elements of the project took time to come together and it wasn't until July 1995 when the IBA requested a more detailed technical specification, that Park and LT Projects knew they had a 'goer' on their hands. After a frantic few weeks they produced the 3D computer renderings that put the job in the bag and 1.5 million Deutschmarks was poured into the project coffers.

According to Bruce Kirk, the lighting scheme was devised to accentuate the structural envelope from all perspectives. The team wanted to achieve the desired look with an animated multi-coloured system of light, as Bruce Kirk explained: "The idea was that we could produce a lighting environment that could change on a nightly or even hourly basis. Intellectually, our client found it all very interesting, but practically, they weren't sure whether it would work or not."

At this stage, of course, it was almost three years on from the original idea and both the design and technical specification had evolved considerably. "We needed to conduct trials to ensure that we could achieve the coverage, from a technical point of view," explained Kirk. "From a design perspective we knew we had



the colour saturation and spread and how we were going to control them. We had to discuss and evaluate the feasibility of various approaches and technical possibilities in order to best realise the proposals."

Subsequently, in April 1996, a final technical specification was submitted and the client's approval duly followed with October 13th earmarked for the final completion date. Normally, this might not have been a tall order, but as the ironworks was derelict and as such had no power, it was going to be a close run, not helped by the fact that the substations had been closed down and all the cables had been stolen!

The power around the site had to be reinstalled and so work began on feeding power from the city grid to the substations and laying in the lighting circuits. Once the groundwork was laid, LT Projects were then

free to install the animated lighting, which featured over 400 computer-controlled discharge luminaires. These were principally 200 low metal halide floodlights from Abacus, with various reflectors and lamp types and approximately 60 Meyer Superspot fittings from Commercial Lighting Systems. Additional luminaires were supplied by Philips, Powerlight and Bell Lighting, alongside coloured glass filters from Instrument Glasses. There were also high intensity beamlight projectors from Francis Searchlights, together with 18 specially designed luminaires used to floodlight the site's main chimneys, also from Francis Searchlights.

The entire installation is divided across 105 circuits, controlled by a computerised light switching programme run on a PC through WINswitch, a customised software package designed by a local German designer.

The result at both the Tyseley and Landschaftspark sites, as can be gleaned from the photos accompanying this article, is spectacular, and the likelihood is that these are just the first of a whole new growth area for the lighting industry. The Landschaftspark development, for instance, is just one of 80 proposed reclamations of industrial sites in the Ruhr.

As the Millennium approaches and the momentum for marking the clock ticking from the last dying minutes of 1999 into the early hours of 2000 grows, we can expect to see more and more examples of industrial landscapes shaking off their somewhat grim heritage and rising from the gloom to claim their place on the horizon.

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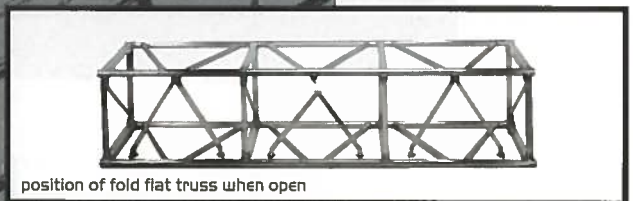
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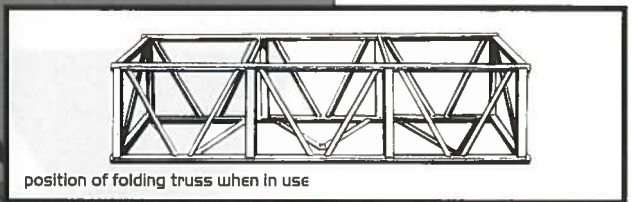
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Second Take . . . John Watt's view from beside the camera

A flyer dropped out of the pages of L+S recently promoting a large number of books on lighting and a CD Rom for a mere £40 - useful if you've got the £1500 kit to run it on. OK, I am one of the last remaining 50 males in the UK that doesn't have Windows 95 - a bit of a leap from my early copy of Fred Bentham's 'Stage Lighting' at 35 shillings. Maybe I should just buy all the books in the hope that they will help me through the next few weeks of indecision which won't be any easier than the last 35 years. I'm sorry budding lighting designers, it doesn't get easier.

We could spend some time debating appropriate key angles to provide decent portraiture. The books are full of little drawings of stick men in elevation and plan, and pictures of heads lit from different points of the compass. No one suggests you make the key horizontal, but currently I have presenters standing on a 7' audience rostra under a 14' ceiling! Yes, ceiling not grid, so even using a pup, by the time it's lashed to the pipe with frayed sash (barrel clamps and spigots waste too much height) the lens is a bit below eyeline. The director doesn't like the shadows on the white background beyond. Neither do I, but that damned light travels in straight lines and only tails off gradually.

Lighting problem number two in the same low studio concerns angles again; even at floor level the low grid still means that keys are very shallow. Everyday stuff for an LD, but with luck normally the bounce off the floor goes harmlessly into the grid. Once angles get down to 10 degrees or so, the scatter skates on to the set or cyc and makes balancing between the two elements impossible, in addition to producing a rather surreal effect on the face keyed from both below and above in nearly equal measure.

Lighting problem three isn't anything to do with lighting, except you lose a man from your crew all the time because of it. It

concerns legislation and electrical regulations. As you've noticed in your hotel bathroom, anything metal these days gets earthed. Designer bathroom suites with gold taps are further embellished with utilitarian earth clips and curls of 9mm yellow and green cable. (In one studio I know of, the rack's guy is earthed too in a vain attempt to make the computers in the CCUs behave - actually it's a plan to stop him making the tea as his cable cleverly stops a yard short of the kettle (doesn't it Micky!). Anyway, metal scenery should now be earthed and, given that designers are now on a crusade to never see another tree felled in their name, there is a hell of a lot of it about. Try explaining this to your production manager when establishing crew sizes in this cruel downsizing world.

Lighting problem number four concerns a 'well known' lighting manufacturer's latest range of controls which feature a multi-function key pad which it's all too easy to mis-punch with fairly dramatic results i.e. a complete blackout. No, I'm not an operator, but I do notice these things, especially when my console op's are old experienced hands. I guess the flat screen mimic is trying to tell us where we're going wrong, but since the print size would enable you to get the complete works of Francis Reid on the screen at once, it is not much help even if it does flash in red. Strangely, I am busy watching camera two and wondering (not for the first time) where I went wrong.

Anway, enough of my troubles and on to someone else's. I do not get to see as much television as I would like. Much can be learned by watching others' triumphs and mistakes. A couple of weeks ago I caught the Sunday morning 'Breakfast with Frost'. Normally, this is studio-based and represents a stock competent bit of production from the team. It's the sort of job I like, where everyone sits down in fixed positions with only a few fixed camera angles. On this occasion they did an OB from Brighton in a hotel lounge

overlooking the sea. I can only assume some sort of non-planning disaster preceded this which graphically demonstrated what all my readers will know i.e. that it can be a hell of a lot brighter outside than in (even producers may have noticed this). If measures aren't taken to balance this extreme contrast, then the best thing to do is teach participants to go down on one knee and sing 'Mammy'.

Unfortunately, Sir David did not seem inclined to do this. The Labour candidate drew the short straw and was framed entirely against the seascape interrupted only by the occasional double decker and two locals walking their dogs. The Conservative fared slightly better - don't they always - he had a potted plant between him and the outside world (they're a cunning lot) and was a bit more visible. I can't remember what happened to the Liberal speaker and the programme content was completely nullified by not being able to see what was going on. All was not lost from an entertainment point of view, however, as the cameras were in shot most of the time. Camera one wore a tie (very nice) and sound arrived late on a regular basis with their fish poles; if they did make it on time the balancer did a late fade to compensate. My heart goes out to the poor lighting bloke. It all goes to prove good clean comedy is still to be found on TV if you seek it out.

This week I have been faced with an Australian presenter who wore his bushman's hat throughout rehearsal (or until I made a fuss). From somewhere underneath he told me he hadn't been very happy with the way he had looked yesterday - he had been watching results on a VHS upstairs in the office on a sunny day. I have been trying to fathom out a polite way of explaining all this ever since Dr Miriam Stoppard told the director to tell "that lighting man" to regard her silver lures jump suit as a challenge. She was right, it was, and her face lost.

Channel 5 will have burst upon us before this issue hits the streets, so I wish them luck as the last of the terrestrial broadcasters and thereby in a unique position to reach a large audience for free. I should declare an interest too, because they have generated a lot of work for the likes of me.

Unfortunately, you will have to use your freeze frame facility to catch my credit which, when it appears, is there for about five frames once in six shows in a series. Those of us in ITV fought for credits for 20 years. They are a valuable promotional tool for a freelancer and now with no opportunity for redress they are disappearing - come on David Elstein we've all got to live!

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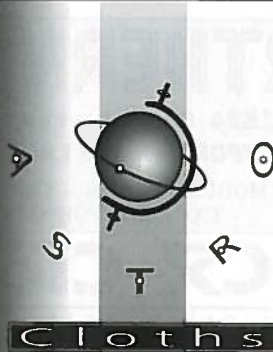
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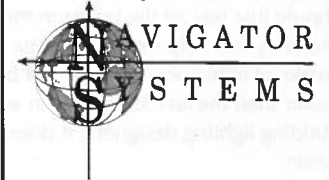
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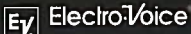





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There as a new buzzword in our midst: RiseTime (RT). But what exactly is it and how much of it is a good thing? Well, to put it simply it is an attempt to measure the noise produced by a dimmer, but with very varied results.

Equipment purchasers and specifiers are paying more and more attention to the RT number in the spec sheets and consequently manufacturers are encouraged to produce designs with ever higher rise-times. Some may think that a higher RT is an insurance policy against lamp noise in a system they are designing - and they may be disappointed.

So what is going on? First a little about why dimmers buzz.

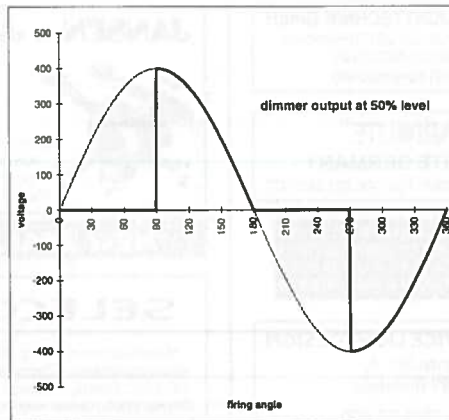
Since the 1960s practically all dimmers have been built using thyristors or triacs. These devices operate like an on-off switch rapidly chopping up the mains waveform. Just as with movies or TV, the human eye is not fast enough to see the lamp flashing on and off. The proportion of time on to time off is what determines the apparent brightness of the lamp.

The rapid switching current in a thyristor circuit gives rise to noise. There are several physical effects that cause acoustic noise. Firstly, there is the thermal shock to the filament, caused by the rapid expansion of a heated metal. Another effect is the magnetostrictive effect whereby a wire conducting current has a tendency to shrink or constrict. In a dimmer all this is happening at 100 times per second. Without some filtering, the noise at the lamp would be intolerable - in addition, the noise extends all they way to the radio spectrum and has to be filtered to meet the CE EMC standards.

The solution is the simplest electronic component of all - an inductor, more commonly known as a choke. This is no more than a wire wound round a (usually) iron core just like an electromagnet. The choke has a tendency to resist any rapid change in the current flowing through it. Modern dimmers use a whole range of choke designs, some very exotic, but they are all just wire wrapped round a piece of metal.

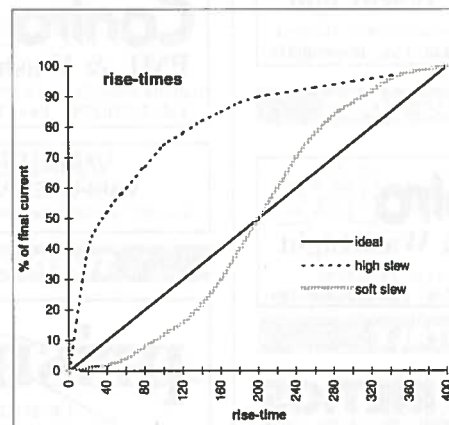
The worst case change of current occurs when the thyristor is turned on at the peak of the mains, half way through a half-cycle. This corresponds to exactly half power and 90 degrees through the mains sine-wave.

Rise-time is measured as the time it takes for the dimmer output to go from 10% to 90% of the full load current at this 90 degree point and is expressed in microseconds. The problem is



that this just tells you how long it took to change, not what happened as it changed. Remember that the noise is caused by how fast the current rises. The ideal choke would rise at a constant rate from 0% all the way to 100%. However, a choke that rose from 10% to 89% almost instantly and then took all of the RT to reach 90% (an extreme example) would still satisfy the RT number and yet would be hopeless as a noise suppressor.

Real dimmers perform somewhere between these two extremes.



The RT is measured with the full load connected as this usually gives the best possible number for the spec sheet, but is anyone telling you how this might change at lower loads? Is anyone asking? The answer may be surprising to some - and again inconclusive. Low load RT can vary between a linear relationship, with zero load giving zero RT, half-load half RT and so on, in some designs to nearly full RT even at quite low loads in others.

Again, actual noise performance may not relate directly to the RT - there is no hard and fast rule that makes higher RT better or worse

than someone else's design, indeed there are some famous-name products that give very acceptable acoustic results and yet have surprisingly low RTs. There are also some designs that boast high RT and yield inferior performance due to the initial high slew-rate (SR) of the output current or suffer from nasty side effects such as voltage overshoot.

The slew-rate is the rate of change of current at the steepest point on the RT curve and is expressed in volts per second. The higher the slew-rate, the more thermal and magnetic energy will get to the load and produce noise. So the ideal situation is high RT and low SR which can be difficult to achieve in practice.

These different approaches arise from the constraints placed on the dimmer designer. Chokes may be the simplest components, but they are also, by far, the most bulky. Modern designs are getting ever smaller and there is no longer any room for the ideal choke so the designer is faced with a dilemma - go for broke on the RT for the spec sheet or try to build a genuinely quieter dimmer, even if this means the RT number is not very good.

Add to all this the fact that most of the weight, heat produced and volts lost in a dimmer are due to the choke and you can begin to see why it might be important to choose carefully the size you need.

Obviously, the RT number is not really telling us what we all want to know; how much noise will I hear in the auditorium? The overall noise level will be affected by many factors - the dimmer itself, the lamp filaments, the construction of the lamp-housings, the wiring, acoustic resonances in conduits and wire-ways etc. What this industry needs is a simple method of measuring acoustic noise of at least some of these elements in a standard, repeatable way.

A simple method might be a reference lamp in an anechoic chamber to produce a noise number in decibels - the reference level might be with the choke removed from the circuit, the dB value would then give the attenuation offered by the dimmer.

This idea needs development and input from industry bodies to determine, for instance, what is a reference lamp. Even if this proves to be difficult to agree on, we could at least start to also specify the slew-rate in addition to the RT. Let's do something to ensure we concentrate on producing better products and not being slaves, manufacturers and purchasers alike, to some magic number on the spec sheet.

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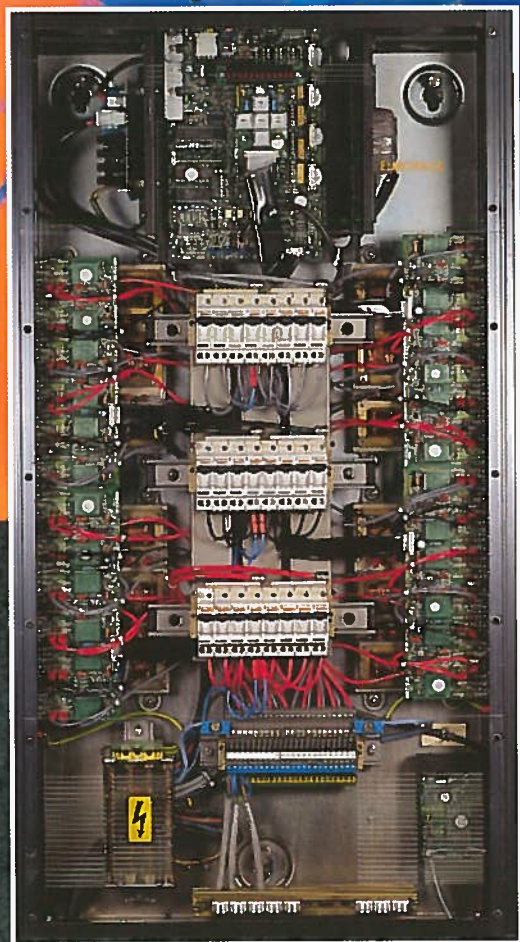
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