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LIGHTING+ SOUND *International*

AUGUST 1994

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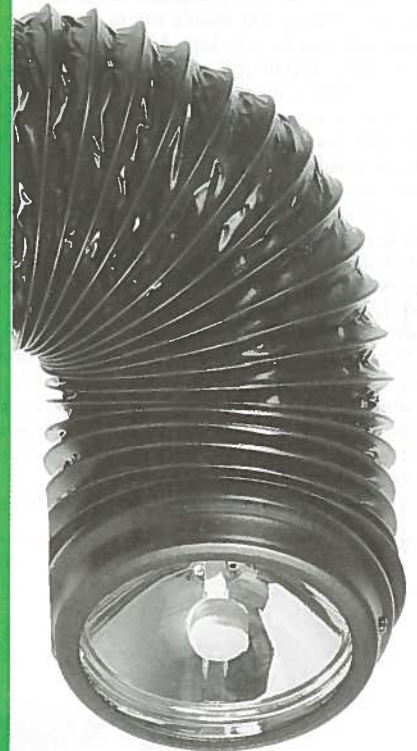
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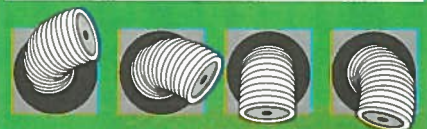
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New Roles for Fisher and Park after Stones

Following hints in our Pink Floyd article (L+SI, June 1994), it was announced on July 31st that Mark Fisher's involvement with Fisher Park is to cease, the last joint project being the current Rolling Stones tour due to kick off in Washington commensurate with this edition.

Both Fisher Park Ltd and the Fisher Park Partnership will be wound up, and Mark Fisher will set up an independent design office under his own name at the existing Walton Street, London address. "Jonathan and I no longer agree as to the future shape of the design process," Fisher told L+SI's Tony Gottelier. "I wish to pursue a more flexible approach and to look at different challenges in the future. I hope this change will enable me to work more closely with friends and clients."

Curiously, as part of the separation agreement, Jonathan Park is retaining the name Fisher Park and plans to set up a new company trading under that name from new premises, though Fisher will have no involvement whatsoever.

The existing partnership has been responsible for some of the most spectacular rock and roll staging concepts during the last 15 or so years, as perpetuated in Sutherland Lyall's book 'Rock Sets'. Meanwhile, the ex-partners are engaged in their last great joint work, the Rolling Stones 'Voodoo Lounge' tour which, largely as the result of their efforts, involves a huge co-production between sister companies Concert Production Lighting, Vari-Lite and Brilliant Stages. In typical Fisher Park style, the 260 feet stage incorporates a feast of visual surprises, including a massive Jumbotron Screen and an inflatable friar.

Co-ordination for Patrick Woodroffe's lighting

design was handled by CPL's Carol Croft in London and Wayne Boehning in Dallas. Amongst the hardware in use there are six DeSisti 20k fresnels and 22 TMB 18k Megalites, both with Wybron scrollers, eight Strong Gladiator 3s, nine 72-way Avolites dimmers and 24 Telescan Mark IVs controlled by a Wholehog. In addition, Woodroffe is harnessing the huge candlepower of the Theatre Projects' Sky-Art projectors with colour changers, in what is possibly the first use of such a powerful automated light within the stage lighting of a rock and roll show.

Voodoo Lounge is the latest in an incredible run of work for Brilliant Stages whose team, led by Charlie Kail, have this year successfully expedited massive sets for The Floyd and The Stones, to say nothing of Torvill and Dean (also featured in this issue - see pages 38 and 39) with barely the time between to draw breath. Now the company are already planning the next one for Take That.

Amidst bucketing rain and tornado warnings in Washington during the set-up, reminiscent of Woodstock 25 years ago this month, which also took place in a sea of mud, dark forces inherent in the tour's title may have already taken their revenge. While the production crew were packing up to return to their hotel in the early hours during the get-in at RSK Stadium, the massive Jumbotron screen crashed 60 feet to the floor of the stage. Apparently, due to inadequate and untested fixings, the standby ex-Genesis screen has been hastily pressed into service. Miraculously, no-one was hurt. The technical aspects of the Rolling Stones' Voodoo Lounge tour will be covered in detail in the September issue of L+SI.

Squire: End of an Era

Squire Light & Sound went into liquidation on the 8th of July this year. The company was perhaps one of the longest serving in the industry, having been founded in the early seventies by Roger Squire who subsequently sold the business. Since then ownership has passed through several hands. The Squire empire was something of a proving ground for many in the industry who cut their teeth at the company before translating that training into a solid footing on which to found their own operations.

Managing director Keith Isaac told L+SI that market conditions had forced the company's hand at a time when retail sales were dropping away, and the war on prices had created a climate of undercutting.

Of the four trading offices, only Guildford and Glasgow remained operational, with Manchester closed, and the Birmingham operation subsequently sold to a former employee. The Guildford operation has been purchased by two members of the Squire team who will trade under the name of Guildford Sound & Light. It seems likely that the Glasgow arm of the operation will follow suit.

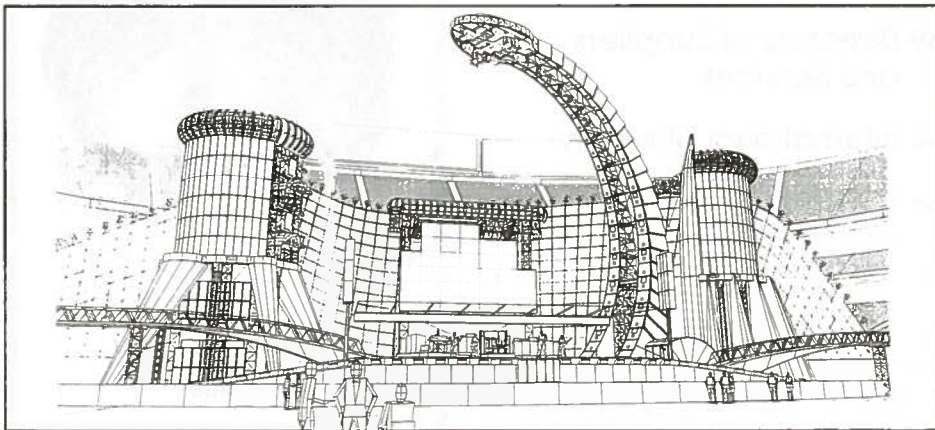
Keith Isaac commented: "Everybody is finding it tight. The contract side was turning up lots of leads and converting them, but in the end too many clubs decided not to go ahead. We couldn't cut back any further, and with the overheads created by a nationwide operation, we had no option but to call in the liquidators."

The company's demise couldn't have come at a worse time for the fragile nightclub market, which seemed to be taking the first steps towards recovery.

Shuttlesound Split

Shuttlesound have announced that Tony Oates has decided to resign from the company. Jointly responsible for starting the company, he has been with Shuttlesound since its inception 12 years ago. Commenting on the decision, sales manager Bill Woods told L+SI: "Tony's decision to leave was not one that was taken without careful thought and consideration, and although he will be missed we must respect his reasons and accept that this was the right decision for him."

There will be a certain amount of internal reshuffling at Shuttlesound to accommodate the new situation, meanwhile business continues as usual. It is not known at this stage whether Tony Oates will continue to take an active role within the sound industry.



Fisher Park's stunning set design for the Rolling Stones 'Voodoo Lounge' tour.

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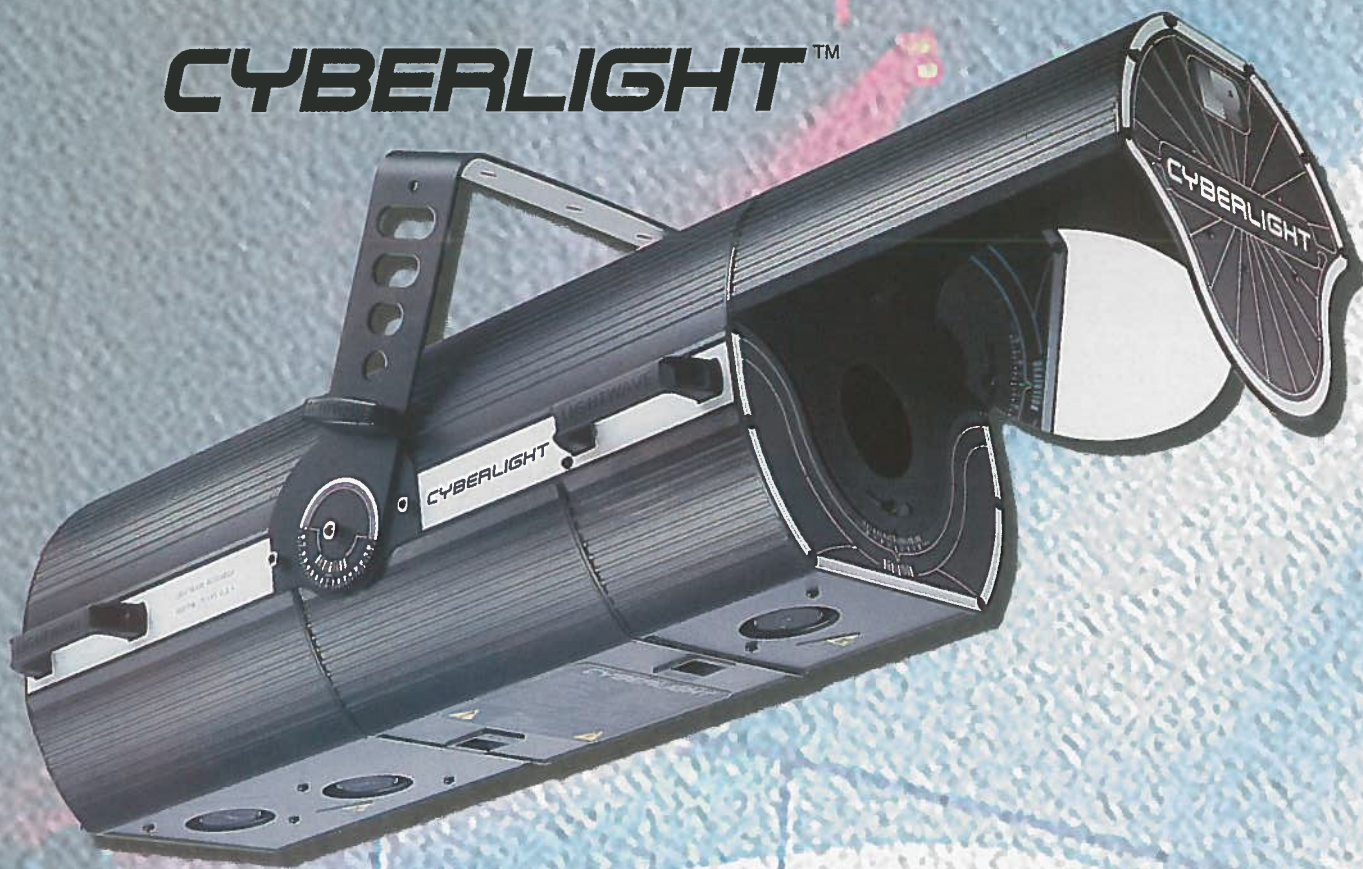
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- Split and rotating color effects
- Multi-color gobo effects

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- Mirror head pan and tilt: 170° by 110°
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HS&HS Open House



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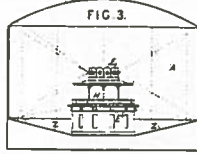
Harkness Screens & Hall Stage recently held the first of an regular series of open days where visitors to their Elstree showrooms will have a chance to view the company's wide product range, substantially extended when the two companies joined forces.

The central feature of the main showroom is a screen frame assembly, which has linked masking operated by a new control system. Moving round the room, visitors will come across a stage exhibition rig displaying the company's T400, T60 and T70 tracks, raise and lower sets, a radio-controlled electric roller screen and a full range of Novalites with control desk. Visitors will also have an opportunity to operate one of HS&HS' specialist lines of large counterweight pulleys.

Tucked away in an ante-room is the Novalite Colour Eliminator Light which has the intriguing ability to transform colours to a black and white image, and which will surely find a home in live theatre as a result. Also available for demonstration is Autostage, a simple computer-based operating system designed to control just about everything in the showroom. Elsewhere on the Elstree site, the company's stage production area was the background for demonstrations of a Denham and Elstree roller screen and a prototype integral track drive, further developments of which will be officially launched at PLASA.

HUNDRED YEARS AGO THIS MONTH BRITISH THEATRICAL PATENTS 1501-1900 Intro to Patent Abridgement No 16326, August 27th 1894: Joseph Train

16,326. Train, J. Aug. 27.



Panoramas.— A series of magic lanterns E, mounted on a stationary or revolving platform, throw the scenes on to a polygonal or curved white screen A; and auxiliary lanterns E¹, below the platform H carrying the spectators, throw light on the foreground Z. Instead of the screen forming a complete circuit, it may be of a horse-shoe or other incomplete shape, and a representation of a dock-house, ship, or other object, may fill in the broken part of the screen.

By 1894 the concept of a panorama was already a well established idea. Most consisted of a panoramic or cycloramic scenic canvas, often visually reinforced in the foreground with three-dimensional figures and 'props'. In this instance however, Joseph Train proposed a 360 degree projected panorama technique, incorporating foreground projection, which is in many ways still in common usage today. The optional provision of a revolving viewing platform provided added comfort for the spectator! This patent simply serves to illustrate the Victorian appetite for new and exciting visual spectacle. Even today it would be quite an interesting experience to visit a panorama such as this. Imagine then the wonder of it all to an audience with no knowledge of television, or moving images.

Tour de Force

In an attempt to emulate the atmosphere of a French town, over 50 Bose 802 speakers and 12 Bose 402s were installed along one mile of Winchester High Street, when the Tour de France passed through recently. All the speakers had to be set up in the daytime prior to the event, then removed for security overnight prior to re-installment the next morning. The distributed system, together with all the amplification, electronics and cabling took local sound company Whitwams and David Harding and his team two days to install. All the products were supplied by Bose UK, whose French counterpart is the official supplier to Le Tour, with support and system design from Bose man John Sabell.

Pitch Perfect

Four years after the original 'Three Tenors' concert in Rome, Pavarotti, Domingo and Carreras were once again linking opera with football, but this time at the 56,000-seat Dodger Stadium in Los Angeles.

The impressive stage featured classical columns, backed by a forest of real boulders, trees and shrubs which was flanked by two massive man-made waterfalls, stretching 40 feet high. The lighting for the concert was designed by Olin Younger of the Klages Group, whilst Obie supplied the lighting including 600 focusing lights and 50 9-Light Minibrutes. Vari-Lite Inc supplied 12 VL5s and eight VL2Cs which were used to simulate the waterfalls when the real things had to be shut off to allow the performance to take place unhindered. Control was provided by an ETC Expression and Vari*Lite Artisan. Over 20,000ft of cable formed a major part of the equation.

Alexander Yuill-Thornton was sound designer, with Jimmy Locke and John Pellow assisting on live and recorded sound. Promedia provided the sound system which featured the new Meyer MSL5s, working through a Yamaha PM4000 desk.

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People News

Due to major re-structuring Jem have strengthened their team with three new recruits. **Paula Taylor-Pick** and **Bob Wells**, who will jointly handle the processing of UK and export sales. The appointments will enable sales director John Petts and technical sales director Mike Wood to concentrate on new areas. Meanwhile, **David Taylor** has been appointed factory general manager. He will be responsible for all aspects of the production of the company's smoke and pyrotechnics ranges. With HOT Technology making its debut at this year's PLASA Show, the company are promising revolutionary advancements in special effects and lighting technology.

James Dann has joined Supermick Lights as sales director. Dann was a lighting designer originally working with such artistes as Queen, Eric Clapton, Elton John, and more recently with Meteorlites, before forming his own production company DLD. He will continue the DLD operation, but will work closely with Peter Clarke of Supermick overseeing both European and American business.

Peter Maddison has joined Adam Hall Ltd as UK sales representative. His main task will be to promote the Wharfedale and Fane Products nationwide.

Vari-Lite, Inc has announced the addition of **Wayne Boehning** to its current sales staff. Boehning was previously lighting crew chief for a number of major tours, including those of Paul McCartney, Genesis and Whitney Houston.

Jean-Bert Toby is to leave Jansen & Jansen to join the Avolites UK team. His role will be taken over by his assistant for the past three years, Anjo Juiper. At Avolites Toby will be responsible for product development.

Derek Davies chief executive of the Samuelson Group, has appointed **Rachel Henshaw** as a director of Theatre Project Sound Services Ltd, and **Simon Livingstone** as a director of Samuelson Communications Ltd - both are the general managers of the respective companies.

Mark Ray has become sales and marketing manager for 3G Ltd. He has been in the music business for the last 15 years, most recently at Adam Hall Ltd and has a special knowledge of the US and Far East markets. Ray will be looking for new distributors worldwide for 3G mixers, particularly in the USA.

Penny & Giles have promoted **Fred Howse** to the post of sales director. Previously sales manager, Howse has worked for the company since 1982, holding several posts within the studio equipment, conductive plastics and inductive technology divisions.

Linda Barrow has been appointed deputy director of events at the National Exhibition Centre and sister venue the National Indoor Arena in Birmingham. Linda will continue her close links with the concert market, developed during seven years as manager of the award-winning NEC Arena, while taking a wider role in managing the Events Division.

Turbosound has a new managing director. **Steve Reville** has taken the helm at the Sussex-based loudspeaker company, in addition to his role as MD of The Edge Technology Group within the Harman Group. Reville's appointment is the logical extension of his long relationship with Turbosound.

Nigel Turner has been appointed support engineer for DDA. In his new position he will provide global support for DDA users as well as working with the company's sales and engineering departments on the specification and implementation of customised consoles.

Klark Teknik have appointed **Bob Harrison** to represent their range of signal processing products in the UK. He will be responsible for sales via the existing dealer network which was previously handled by Network Distribution.

The Association of Multi-Image International (AMI) has awarded a Silver Award for 'Production Lighting' to **David Atkinson** for his work on the Rover 600 launch held at the ICC in Birmingham last March. The project was featured in the April 1993 issue of L+SI.

Jermyn Street Theatre Opening



What must surely be one of the smallest performance spaces in the UK opened last month. With barely room to swing a cat, the Jermyn Street Theatre seats less than 60 and features a small number of Parcans and minimal sound reinforcement. Run by STAGE (the Society of Theatrical Artists and General Entertainers) the theatre will act as a springboard for new actors, writers, directors and technicians, whilst raising funds for children's charities. Pictured above are the trustees of the theatre Howard Jamieson, Penny Horner, Jill Harmer and Peter Durkin with Stefano Fraquelli (centre), MD of Spaghetti House restaurants, who own the building.

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Sagitter appoint JYG

JYG have been appointed UK distributor for the Sagitter range of products. The Italian automated luminaire manufacturer is not widely known in the UK, but JYG hope to change all that by promoting the range on their stand at PLASA, where the official hand-shake on the distributorship will take place. JYG's stand will feature Sagitter's established range including the Prince Scan luminaire and its controller, Digiflash strobes and Digiflash master controllers. The Show will also be the launch for several new products, including a Dichro Ray, Dichro Ray Scan, Centrepiece and Colour Zoom.

Wax Superstars

San Diego-based RA Gray, has recently completed installation and programming of a new control system for London's well-known Madam Tussauds Wax Museum. The RA Gray performance Playback System was chosen to control lighting, sound, video and show action equipment for the 'Superstars' area of the exhibition. Old reel-to-reel tape machines and solid-state audio were replaced by the company's Sound Solution - a CD-based audio playback system which also provides control for the exhibits video disc player. The installation follows the completion of a show control system and an on-board audio system for the exhibition's 'Spirit of London' dark ride which opened last year.

D-Day for Powerent

Kent company Powerent provided the electrical power that ensured millions of TV viewers around the world received live transmission from the Normandy beaches during the Anniversary of D-Day. The company was contracted to provide power to the BBC, amongst others, to guarantee continuity of supply for the live broadcasts.

Mobile Force



As can be seen from the photograph above, Adam Hall Ltd are now actively promoting the Wharfedale Force Sound Systems. Any clubs or companies interested in the system should contact Adam Hall Ltd on (0702) 613922.

Moscow All Music

The Moscow All Music Show is the first exhibition for the music industry which will open doors to the lucrative Russian market-place. The Russian economy has undergone dramatic changes in the last five years, and despite censorship, lack of equipment and few opportunities for public performance, the music industry has survived and is now flourishing. The 'leisure' sector is the biggest beneficiary with disposable income and availability of consumer goods both increasing. A huge market has opened up for suppliers of equipment and services to music and related industries, including lighting and sound. Venues around Moscow will be available for exhibitors to showcase their products/services and a social programme will be arranged to introduce exhibitors to the local market. The show runs from 23rd-26th November at the World Trade Centre in Moscow. For details contact organisers Morlader in London, telephone 071-439 1271.

Arbitration Demand

Following our lead news story in May on the complaint filed by Colortran Inc against ETC which, among other things, alleged patent infringement, L+SI has received a written statement from ETC outlining their response.

Dave Cunningham and Gregg Esakoff, principals in ETC Inc, have filed a Demand for Arbitration against Colortran Inc, with the American Arbitration Association in Los Angeles, as provided for in their contract with Colortran covering the ENR product line.

They are seeking the payment of unpaid royalties from mid 1991 forward, and payment of misreported royalties from the beginning of 1990 forward, as well as interest charges, late payments, and collection costs as provided for in their agreement. They also seek reimbursement of expenses in defending certain claims in the complaint brought by Colortran in Federal District Court in Los Angeles which are covered by the arbitration clause in their agreement.

Cunningham and Esakoff have also notified Colortran that they will be moving to stay those portions of Colortran's court action that are subject to arbitration.

Dave Cunningham, president of Entertec, told L+SI: "No trade secret or confidential information belonging to Colortran was used in the development of the Sensor dimming product. Great care was also taken to avoid infringement of any of Colortran's valid patent rights during the development process of that product."

Yamaha on Line

Yamaha-Kemble (UK) Ltd, has closed its free information hot line service and the (0908) 249194 number has been discontinued. In its place is a new product information service on (0908) 369269. The new line is a 24 hour service covering products from all Yamaha divisions.

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Irish Carnival



Lighting Dimensions (WL) supplied lighting to the major centenary event for The Irish Congress of Trade Unions which took place recently in Dublin.

The event, billed by the sponsors as 'The Carnival of the Century' featured a cavalcade, fireworks, street parties and various musical events. The climax of the evening was an open air concert held outside the Bank of Ireland featuring Something Happens, Moving Hearts and The Saw Doctors. Lighting Dimensions (WL) provided a variety of lighting equipment, including Golden Scan 3s, together with motors, trussing and rigging as specified by lighting designer John Holland.

Forward Vision

One of the main exhibitions for the UK broadcast market has announced a major expansion for its return on 17-19th October 1995 at Olympia's National Hall. The biennial Vision event made its debut last year by bringing together over 140 equipment and service suppliers. Organisers Single Market Events Ltd have aimed the event at a larger audience and have also attracted more exhibitors by expanding the event to another floor, as well as including a series of seminars offering practical training sessions. For more information telephone SME in London on 081-948 5522.

Meyer at Montreux

The Montreux Jazz Festival is a Meyer-sponsored event once again this year, with Meyer supplying a massive collection of over 200 loudspeaker units and processors for the Festival PA. Now in its 28th year, the Festival is featuring an exciting musical mix, ranging from Van Morrison to Johnny Cash.

The activity encompasses three principal performance areas - the Stravinski Auditorium, the Miles Davis Hall and the open-air Off Festival area - all of which are being equipped with Meyer systems. Local Swiss dealer, Hyperson Sonorisation, has provided extensive support in conjunction with the Meyer Sound contingent, who are on hand throughout the Festival. A key player in Meyer's line-up is the powerful SIM System II acoustic analysis system, which is being used to align and optimise each of the three main systems as well as for in-performance monitoring.

The 2000-seater Stravinski Auditorium majors on the recently launched Meyer MSL-5 loudspeaker system, which made its debut at Montreux Jazz last year. For 1994, acoustic treatment has been applied in the form of drapes, providing a somewhat more cost-effective solution than the panels used for the 1993 Festival. The system is configured in stereo, with three MSL-5s per side, complemented with four DS-2 mid-bass and five 650-R2 sub-bass units each side. The MSL-2A unit is used for the fill and delay systems. Stage monitoring is made up of Meyer's UM-1Cs and USM-1s.

For the first time this year, amplification for the overall PA is being provided by Crest Audio. Their new 9001 is featured in the main PA, with the 4801 and 8001 amps for the stage monitors. Also featuring is Crest's NexSys computer controlled audio system - used to control the gain of the amplifiers remotely, as well as monitoring temperature, signal input level and loading conditions during performance.

The industry standard MSL-3A loudspeaker provides the anchor for the Miles Davis Hall PA, with DS-2s and 650-R2s for low frequency reinforcement. Off Festival features the MSL-2A/MSW-2 combination, representing a Montreux first for the new subwoofer. A new venue for 1994 is the Montreux Jazz Cafe, providing a tropical space for everything from rap to jam sessions, DJs and more. This is equipped with a small stereo system, comprising two UPA-1C speakers with a 650-R2 subwoofer per side.

Son of Hog

Flying Pig Systems has announced that it will launch Wholehog II at the forthcoming PLASA Light & Sound Show. The console combines the features of the original Wholehog with a host of new tools - such as automatic programming facility and a 3D focusing system, designed to make programming shows quicker and easier. In addition, the Wholehog II incorporates the familiar syntax and functions found on most advanced theatre consoles and has a wide variety of expansion, configuration and communication options.

Sent to Coventry

A giant tiered stage, large enough to hold 500 choristers and the major part of a 100-piece orchestra, was installed overnight in Coventry Cathedral by Stage Services of Loughborough, without using a single nut, bolt or screw, enabling the International Church Music Festival to start the following day. Measuring 60ft deep, 64ft wide and 12ft high, the temporary tiering was the largest stage ever built in Coventry Cathedral. The tiering was specially designed by Stage Services' sister company Stage Systems, using its Pro-Tec, Q-Build and Q-Plus demountable staging. Despite its size, the whole structure was installed overnight and dismantled in less than three hours.

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Rave in the Dortmunder Westfalenhallen

For the ravers and techno-fans of Dortmund 'Rave Olympia', one of the most popular indoor events in Germany, took place this year in three venues for the first time. The extra space was dictated by the growing number of visitors, which this year totalled 23,000 and the technical specifications for the event became a major undertaking for the sound and lighting companies involved, which included Showtec, Production Partner, Mayday GmbH, Stage Kinetik, Tarm and Adam.



Hall 1 featured a massive dancefloor, measuring nearly 2.500sq.m dominated by a huge truss. 44 Vari*Lite VL2Cs and 32 VL5s were mounted on the cross beams of the truss. The conventional lights, supplied by Showtec of Cologne, featured 12 Strobe-Racks (each of which can include up to four Terra-Strobes), 12 Molefays and 36 Par 64s, all fitted with ColorMags. Five high power lasers from Tarm were also involved, as well as nine smaller lasers. The projection was relayed onto two movable screens within the hall, and two Barco 5000 projectors were used to project video images.

An Electro Voice double bass system supplied the heavy bass sound needed and 24 EV Deltamax speakers were suspended from the ceiling.

No less than 58 EV MTL4 bass boxes and 52 EV MTH4 formed the backbone of the PA system. Eight clusters, each consisting of eight bass and six mid-high systems were placed around the hall to create a concentrated sound. The system was controlled from a Midas desk.

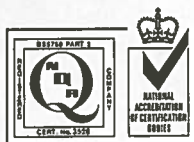
Hall 2 was the 'Chill Out Space'. VPS-Video from Krefeld used two Barco 5000s on video screens for projections, and visual effects were provided by Scudi Optics, with colour slides used to great effect in the 1,500 sq.m hall.

In the 'Sub Space' in Hall 3 the lighting installation consisted of two flying trusses which were equipped with 16 Goldenscan 3s, alongside a range of Stroboscopes and Pars. Five larger-than-life blimps served as special screens onto which 16mm projections were bounced. In Halls 2 and 3, 12 Dynacord boxes and four bass-systems were used in the 'Chill Out' zone to create a 'rounder' sound. Hall 3 also featured EV MT4 speakers to help create a 'club' atmosphere.



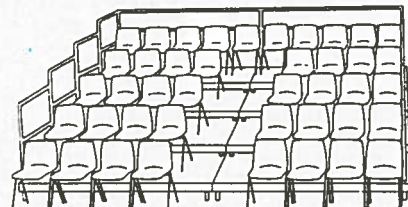
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ADDA Another



ADDA Super Cases can now offer a whole range of cases to house both Abstract and Martin products. All the cases are made in strong black polypropylene and lined with foam to give added protection. Pictured above with the cases is ADDA's Monica Saunders, who hopes that they will prove popular with all Abstract and Martin customers.

Stage Set for PLASA

With only six weeks to go, advanced registration figures for the 1994 PLASA Light & Sound Show indicate that this year's event will reflect the general upswing in business throughout all leisure and entertainment industry sectors. A record number of exhibitors and visitors is expected to converge upon Earls Court 2 between 11th-14th September for four days of show-stopping product launches events and seminars.

Capitalising on its reputation for attracting record numbers of overseas exhibitors and visitors, the Show is again the place to be for meeting VIP industry personnel and forming new business contacts. Many are in agreement that the show is pivotal in assessing marketing strategies and placement of new product. Last year's show netted firm orders for 72% of all exhibitors.

With a huge number of new products being launched at this year's show, attendance is mandatory for those who wish to keep abreast of industry trends and the latest technology. ARK Acoustics, the Northern Ireland loudspeaker manufacturer, is making its first appearance at the Show and is launching two new products - Alpha and Ace. Another company taking a stand for the first time is Stage Technologies. Founded 18 months ago, the company has already established a name for itself in the world of computerised motion control, particularly with regard to theatre musicals. The company will launch their Acrobat Control System at the Show. Artistic License has, in the past shared a stand at the Show, but will make its first solo appearance this year, and will also launch several new products.

Having established themselves as a regular feature, the PLASA Show Awards promise to be a hard fought battle. 52 products have been nominated, including 18 from first-time exhibitors and the forms keep coming in! A full seminar programme will also run at the Show, details of which can be found on page 48.

LETTERS

Dear Editor

Many congratulations on the introduction of Ian Herbert and 'Asleep in the Stalls' to the magazine. I enjoyed his Viewpoint (Feb 94) and his subsequent articles. It brings a controversial and new cutting edge to a magazine whose role has largely been one of presenting information.

As a theatre-based, although freelance, reader, I am all too aware that, while the hi-tech end of the business is much 'sexier' and creates bench-mark work, many people are creating good or excellent work, despite tiny budgets. Only occasionally have you run stories of their efforts, which are echoed over the majority of the diverse business that you cover.

By way of example, it is these theatre readers who will be bemused by the long debates in your magazine about DMX512; it's not that we don't understand the debate (although the electronics is out of my range), it's just that we manage on obsolescent equipment, and are very aware that no capital is available for new equipment of any sort. We probably want DMX512 to stick around, after all it existed for some years before it became the standard specification that it now is (even Rank Strand use it now). As Francis Reid wrote in an earlier Viewpoint, let's have more optimum and less maximum.

Keep up the good work; but more independent views and opinions please.

Stephen Hubbard

Laser Grafix Again

Following our notice on page 10 of the July issue regarding the closure of Laser Grafix Sales and Hire Ltd, we understand that a new company, Prisma Holographics Ltd, has bought the assets and goodwill from the liquidator and will trade from the same premises as Laser Grafix. The estimated total deficiency of Laser Grafix Sales and Hire Ltd, announced by the liquidator, is £141,091, subject to costs.

Amptown Effects

The Effects Company has appointed Amptown of Hamburg as exclusive distributor of its complete range of smoke machines in Germany. Amptown will be looking to create new markets for the range and has already had a good level of response, with initial sales looking healthy. The Effects Company meanwhile, has reported a general increase in sales world-wide.

LOOK OUT FOR PLASA PREVIEW
DETAILS IN THE NEXT ISSUE

Optikinetics Womad

Optikinetics provided special effects lighting for the Whirl-y-Gig indoor stage at this year's Womad (World of Music and Dance) Festival at the Rivermead Centre, alongside the river Thames in Reading, during the weekend of 22-24th July.

With the help of locally based An Arc Light, Optikinetics assembled the largest ever display of their equipment. Over 60 effects projectors, including 15 of their high-powered Solar 575 units, helped to ensure that the usual ambience enjoyed at Whirl-y-Gig's weekly London venue was surpassed at Womad.

Appearing on stage from 6pm until dawn were bands including Headcharge, Banco da Gaia, Loop Guru, Astralasia, and many more. The musical programme was linked by Whirl-y-Gig's resident DJ Monkey Pilot and the night ended with the famous Parachute Dance.

Over the Moon



A huge number of guests attended the official opening in July of the new Half Moon Theatre For Young People. The theatre has been based in the East End of London for over 20 years, and is supported by various funding agencies and partnerships with private companies. It is a much needed creative outlet in this deprived area.

The newly renovated building now houses a theatre space and studio, as well as training rooms, a creche and facilities for the disabled. It has been modernised throughout, but has kept much of its Victorian splendour. Future plans include new dressing rooms and showers, craft studios and even a recording studio.

Many local schools can take advantage of drama workshops run by the theatre, and its touring company also takes drama out into the community. The technical training courses led by Dipak Mistry are a good opportunity for young people leaving school to train in sound and light for the theatre, thus enabling them to go on and find employment in this field. The theatre targets disadvantaged young people and opens their eyes to creative new experiences and opportunities that they might otherwise never encounter.

Several PLASA members have supplied equipment to the theatre, including Lee Filters, Harkness Screens and Hall Stage.

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PROFESSIONAL SHOW LIGHTING

Sound Shorts

Martin Audio have recently shipped additional F2 Systems to Milan Acustica in Madrid and to Spanish rental company Peymar. Both companies already have substantial hire stocks of the Martin F2. The systems have been supplied by J L Alberdi of Barcelona, Martin Audio's authorised distributor for the Spanish market.

Soundtracs have appointed Bluaudio to promote their range throughout Italy. Based in Bologna the company have an extensive sales network across the country with a representative for every region.

Tannoy has capitalised on the success of its hi-fi range in China by a major expansion into the market with its professional range. Hong Kong-based DCH, with offices in Shanghai and Guangzhou, has put in an initial order valued at over £40,000 for the recently launched SuperDual loudspeakers. The company is also in the process of recruiting a specialist team to oversee installations using the SuperDual throughout China. To date, 20 pairs of each of the range have been shipped to the country.

Kelsey Acoustics have re-located to a new 5,000sq.ft facility and can now be reached at 27 Beethoven Street, London W10 4LL. Telephone 081-964 8000.

Autograph Sales report brisk business for the Meyer Sound high definition HD-1 studio monitors, with Mike Oldfield, Sarm, Canegreen, Hilton Sound and Dreamhire amongst the latest recipients. Canegreen's units are destined for a studio client, whilst Dreamhire and Hilton Sound have been hiring them for recording rentals in London. In total, Autograph Sales has shipped seven pairs of HD-1s over the past three months.

A **Soundcraft** DC2000, chosen recently as the basis of a recording package supplied to the Presidential Orchestra of the Russian Federation, will be responsible for making some of the most exclusive recordings in the world. Heads of state

are often presented with a special CD recording of a concert staged in their honour, and it is these recordings, amongst others, that the DC2000 will be used for. The system includes three Tascam DA88s digital 8-track recorders, controlled by the DC2000. The new equipment, supplied by Denis Tyler Ltd, represents a significant upgrade of the in-house recording facilities. The next Soundcraft Going Live sound engineering weekend will take place from the 19th to the 21st of August at the University of Manchester.

Raper & Wayman is now the exclusive UK distributor for t.c. electronic. The distributorship covers the full t.c. electronic product range, including the M5000 and the new MD2 multiband digital mastering dynamics package. Pictured below is Carsten Lebeck of t.c. electronic (left) with Rodney Wayman of Raper & Wayman.



Nexo has further extended its world-wide distributor network with the recent appointment of Inova. The new region covers areas of the Gulf, including Dubai and the United Arab Emirates, Saudi Arabia, Qatar, Oman and Kuwait.

Chrysalis Television has ordered a number of **Tannoy** System 9 NFM II loudspeakers, from Michael Stevens & Partners. The speakers are to be installed as part of a refurbishment project following a new contract between Wire Television and Chrysalis Sports, signed earlier this year.

Marquee Audio have recently undertaken a contract to provide a distributed sound system for the 'Sea Lion Bay' at Chessington World of Adventures. The system utilises 14 JBL Control AWs, a Soundcraft Folio mixing console, Hill amplification and Beyer Dynamic radio mics.

London-based **Big City Sound** have reaffirmed their commitment to provide a comprehensive PA touring system by complementing their Electro-Voice MT2 system with a brand new monitor system. Consisting of 10 bi-amped Accord S212W floor monitors (built by Marquee Audio), this new monitor system is powered by Crest amplifiers with Crest Optal two-way crossover/limiters (provided by LMC).

EMO graphics are being used for FOH equalisation as Aerosmith play at various festivals around Europe this summer. Swiss company Audio Rent are supplying the FOH mixing console and effects racks which are being interfaced with the house PA systems via GEQ60 graphics.

MAC Sound provided equipment and engineering services for the Pepsi Max Big One (see cover story last issue). The company installed 96 channels of DDA mixing console, 44 Meyer MSL3 speaker systems complete with sub bass and controller amplifier racks distributed to eight purpose-built delay towers covering an area over half a mile long and utilising nearly 8,000 metres of cable for the entire system.

Ohm Industries have appointed two new distributors. In Vietnam, Sinamex Trading will distribute Ohm products exclusively, whilst ASL Electronic will act for the company in Switzerland. Meanwhile, existing dealers LJ Electronics, distributors for the Channel Islands, have reported a landslide of installations in St. Helier, with no less than seven club installations, whilst Odyssey Engineering covering Hong Kong and China, have installed Ohm equipment into several nightclubs, restaurants, hotels and the Royal Opera House in Guangdong Province.

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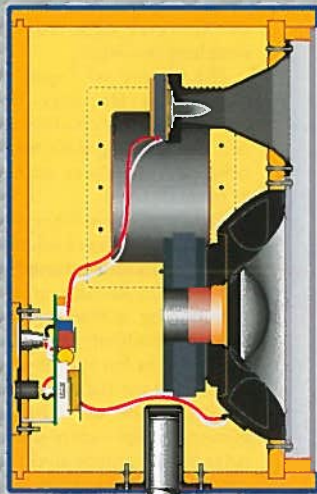
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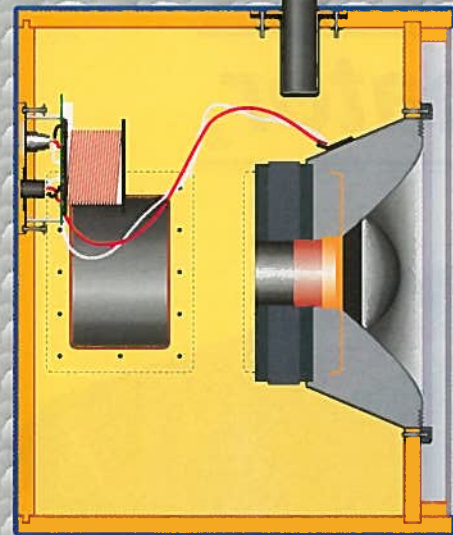
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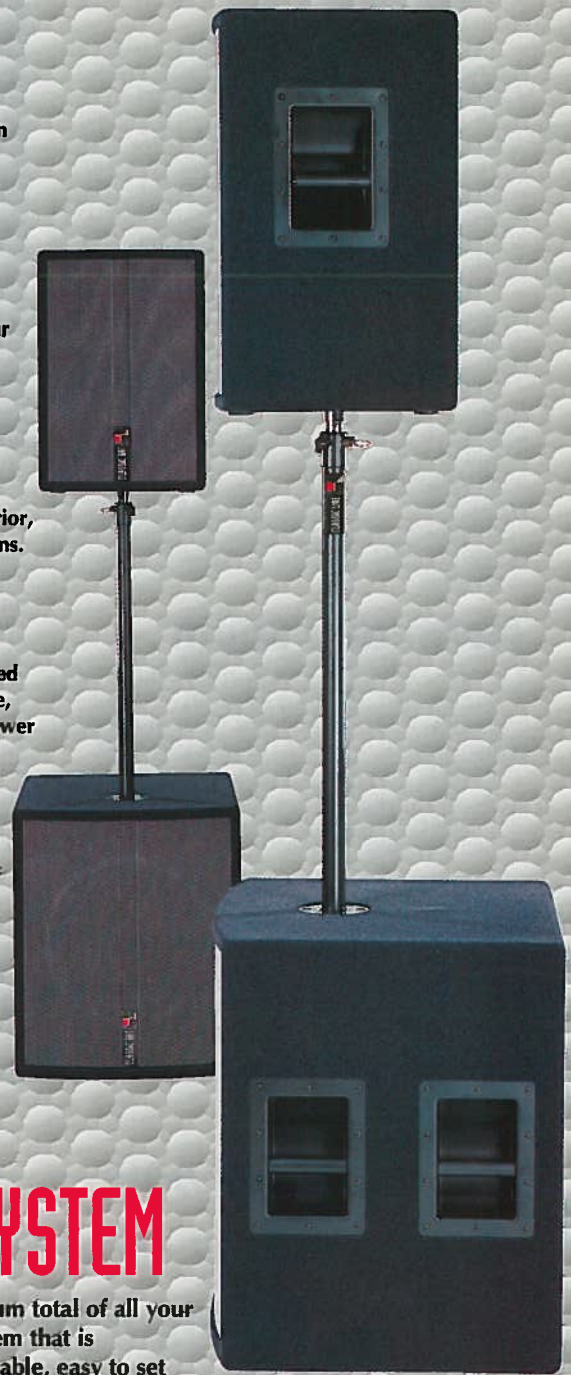
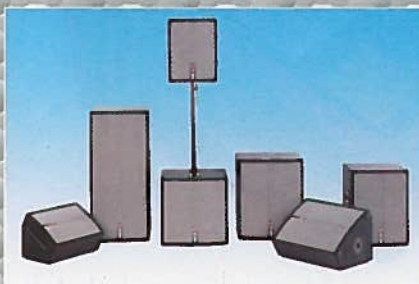
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80 Million Yen

Following hard on the heels of 8th Day Sound's \$1 million contract from the USA, is another huge order for Turbosound - this time from Japanese distributor EdgeTech Japan. The EdgeTech deal - estimated to be worth almost \$800,000 - is the combination of major orders from four separate customers.

Try Audio - who supported Peter Gabriel's 'Secret World' tour in conjunction with existing Flashlight user Yui - have placed the largest order. Their acquisition of 24 Flashlight stacks means that Japan now has the capability to supply a full 48-pair Flashlight arena system to major international acts performing in the country. The Sound Company of Kyushu specified eight stacks of Floodlight to supplement a touring rig which is in constant demand throughout Japan.

The other two orders are destined for fixed installation. The Kintetsu Theatre has ordered eight Floodlights for a rig designed by Turbosound's in-house team in the UK. The new Floodlights will replace an existing Turbosound TMS-3 system. And one of Japan's leading brewers Sapporo has ordered a combined Floodlight/Flashing rig for a new massive all-purpose entertainment venue currently under development. The system will be used at the multi-million dollar complex which includes sporting facilities, department stores and exclusive apartments.

North and South

CP Cases, the London-based manufacturers of flightcases and 19" accessories, have recently merged with BDS and Bulldog Cases. Bulldog's Kilburn staff and plant have relocated to CP's Isleworth premises, and CP now has an established Manchester base with showrooms, full manufacturing plant, and sales and service for its northern-based customers.

Cathedral Colour



Stage Electrics joined forces with LD Brian Harris for a concert by new Chamber Orchestra, EOS, in Exeter Cathedral. The concert (pictured above), one of a series as part of the 1994 Exeter Festival, was lit by candles and 120 Parcans! The candlelight on stage was augmented by only eight of these units, whilst the other 112, ten of which had Strand Colourcall Scrollers, were used to light the building to brilliant effect.

Nick Dixon, Stage Electrics' production electrician for the event, used the 'fan-less' Strand Tempus dimmer rack to overcome the sensitivity of the Cathedral's acoustics. The new Strand GSX desk controlled 78 dimmers and all the scrollers, allowing Brian Harris to work the show live after the minimum of rehearsal.

Expo 98: Lisbon

Bovis have won the project management contract worth £10m for Lisbon's Expo 98, the last major expo this century which will open on May 22nd, 1998 and last for four months. The whole enterprise will cost between £1.2bn and £4bn and the commercial opportunities for PLASA members are huge.

The theme of Expo 98 will be 'The Oceans: A Heritage for the Future'. Portugal's history is closely linked to the sea and the opening date has been chosen to coincide with Vasco da Gama's discovery of India in 1498.

The Portuguese Government and Lisbon city authorities have selected a 310 hectare plot with a 5 km water-front onto the River Tagus. A 25 hectare area within the site, surrounding a disused dock, will be the focus for building and activity. The largest aquarium in Europe, thematic pavilions, a multi-purpose hall, a Portuguese national pavilion, and an outdoor theatre are planned as the centre-piece of the Expo to cater for the anticipated 10 million visitors.

Major communications links to the Expo 98 site are already being planned, and there is ample scope for companies in the entertainment technology industry.

More information on the Expo can be obtained from an English language Bulletin published quarterly. For details contact Parque Expo 98 in Lisbon, telephone 351 1 8370101.

For British companies, a seminar promoting the commercial opportunities is planned for October. If you would like to receive details and an information pack on Expo contact: Jane Hartshorne, Portugal Desk, DTI, telephone 071-215 2751.

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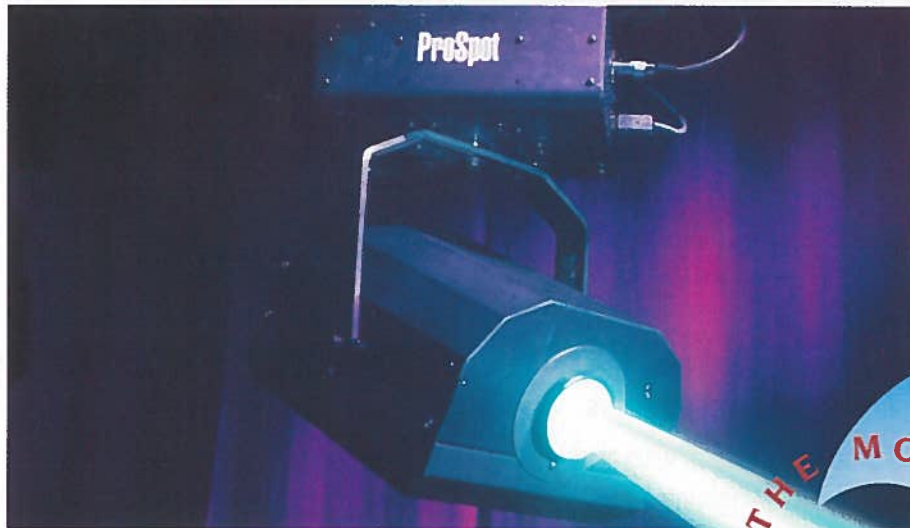


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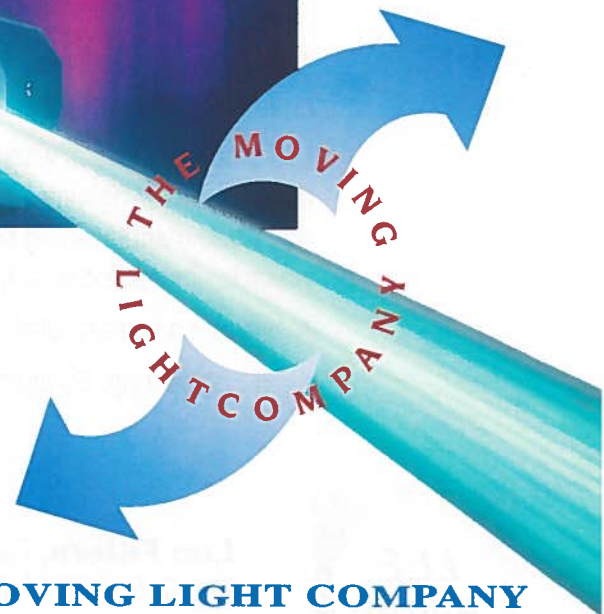


The new ProSpot from The Moving Light Company

The lightweight ProSpot (15kg) is a new moving light, controlled by its own user friendly console, that will suit every application and budget.

The ProSpot has a 600 watt HTI light source, a dichroic colour system with 90 pre-programmed and 5000 customised colours, nine gobos and a 360° pan and 270° tilt - all at a cost comparable to moving mirror fixtures.

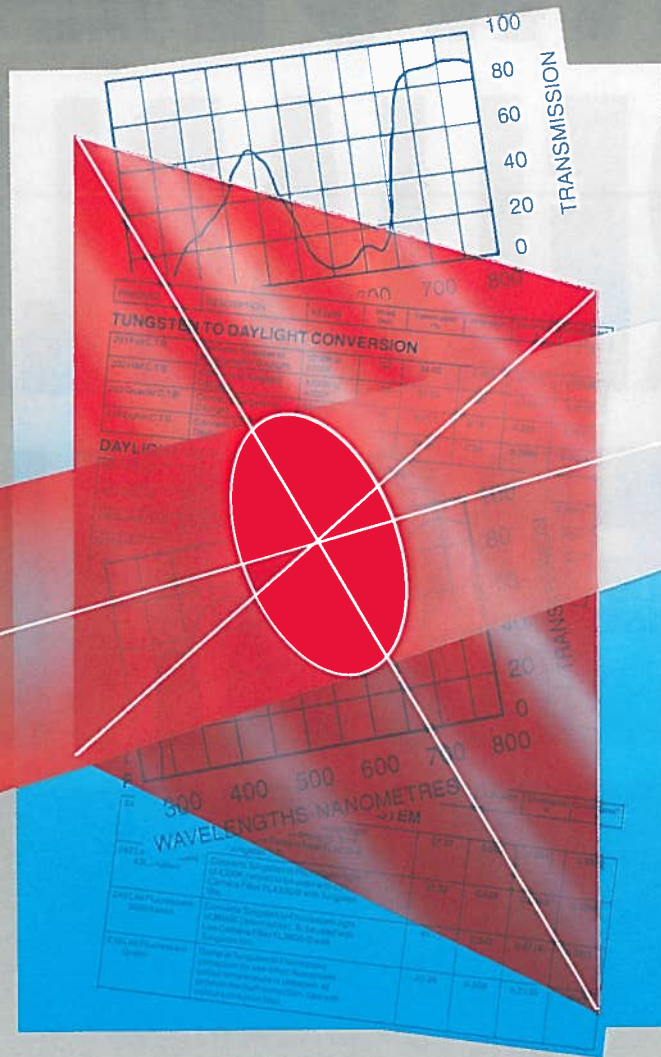
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Light Engineering. Another first from the original European.

Lodestar School

The third free two-day training course for owners and users of Columbus McKinnon Lodestar chain motors is being offered by UK distributors PCM, a division of Pfaff Silverblue.

The course, which takes place on the 7th and 8th September, will include training in hoist motor disassembly, repairs and trouble shooting on the CM Lodestars. Instruction manuals, materials and lunches will be provided for those attending the course which will be limited to a maximum of 20 participants. They will have the opportunity to take a 'hands-on' approach with maximum individual attention.

The presentation will be led by Wally Blount of Columbus McKinnon in the US, supported by Denis Bramhall and John Jones of PCM. Further details are available from Denis Bramhall, telephone 051-609 0101.

Appeal to Theatres

Modelbox is currently updating its Bureau Service plans of UK theatres and entertainment centres and is appealing for any venues not currently covered by the service or which have undergone recent changes to get in touch.

Modelbox has been using CAD technology to build a comprehensive database of ground and perspective plans of entertainment venues for the past seven years. The facility now has one of the most extensive collections of plans available which are regularly called upon by producers and designers when planning tours and one-off shows. In order to keep the information up to date, Modelbox has hired the services of freelancer Stephen Appleby, who trained at Modelbox, to research each venue and update the database.

If you would like to be included on the database, or would like to add information to your entry, please contact Stephen Appleby on 071-371 0110.

Northern Exposure for Soundtracs

A new Soundtracs Solitaire production console has been ordered by Andre Brassard of the Inukjuak Artist Association Inc, based in the most northerly reaches of Canada. The Inukjuak Artist Association are currently organising a spectacular world premiere event to be held in Inukjuak, Nunavik on August 5th and 6th this year. Known as the Inuit Artist World Show Case, the event will give artists from Alaska, Nunavut, Nunavik and Greenland the opportunity to perform to a wider audience than usual. The styles of music will include traditional drum song and dance, violin, country, western, folk rock, blues, jigging and throat singing.



A Soundtracs Sequel II at the Greenwich Festival.

Meanwhile, a Sequel II was recently used by South London company Music Room Hire to provide sound reinforcement for the Greenwich Festival where Jools Holland and his Big Band appeared in the line-up. The console also found its way into the inventory of Kingston hire company, The PA Company, who put it into full swing on the main stage at the 30th Charles Wells Cambridge Folk Festival where a line-up including Joan Baez, Mary Black and Jools Holland (again) played to an audience of 10,000.

LTP Distributorships

Since their appointment as UK distributor for the EAW range of loudspeakers earlier this year, Lighting Technology Projects has been establishing a dealer network to handle EAW sales and installation throughout the UK mainland, Northern Ireland and Eire.

The aim is to provide a group of companies who can cover the complete spectrum of the audio industry offering a high level of both sales and service support. The product range is well established in the UK concert touring industry with both Concert Sound and Cane Green having large 850 systems out on the road. The EAW range of products extends from large concert touring systems down to small studio monitor speakers with everything in between and it is this range of products that LTP are now trying to promote through its dealers.

Companies so far appointed include Sound Electronics in Newcastle, PSD Electronics in Newquay, Pyramid Sound & Light in East Grinstead, Venue Tech in Christchurch, Futurist Sound and Lighting in Dewsbury and the Sound Workshop in Halifax.

LTP has also recently been appointed as the sole UK distributor for the Metro Audio range of intercom equipment. The product range is utilised extensively in the audio industry with a number of the major sound hire companies. Product development has been active during the first half of the year and products added to the range over the past few months include a higher specification single and dual channel belt-pack along with enhancements to the existing range.

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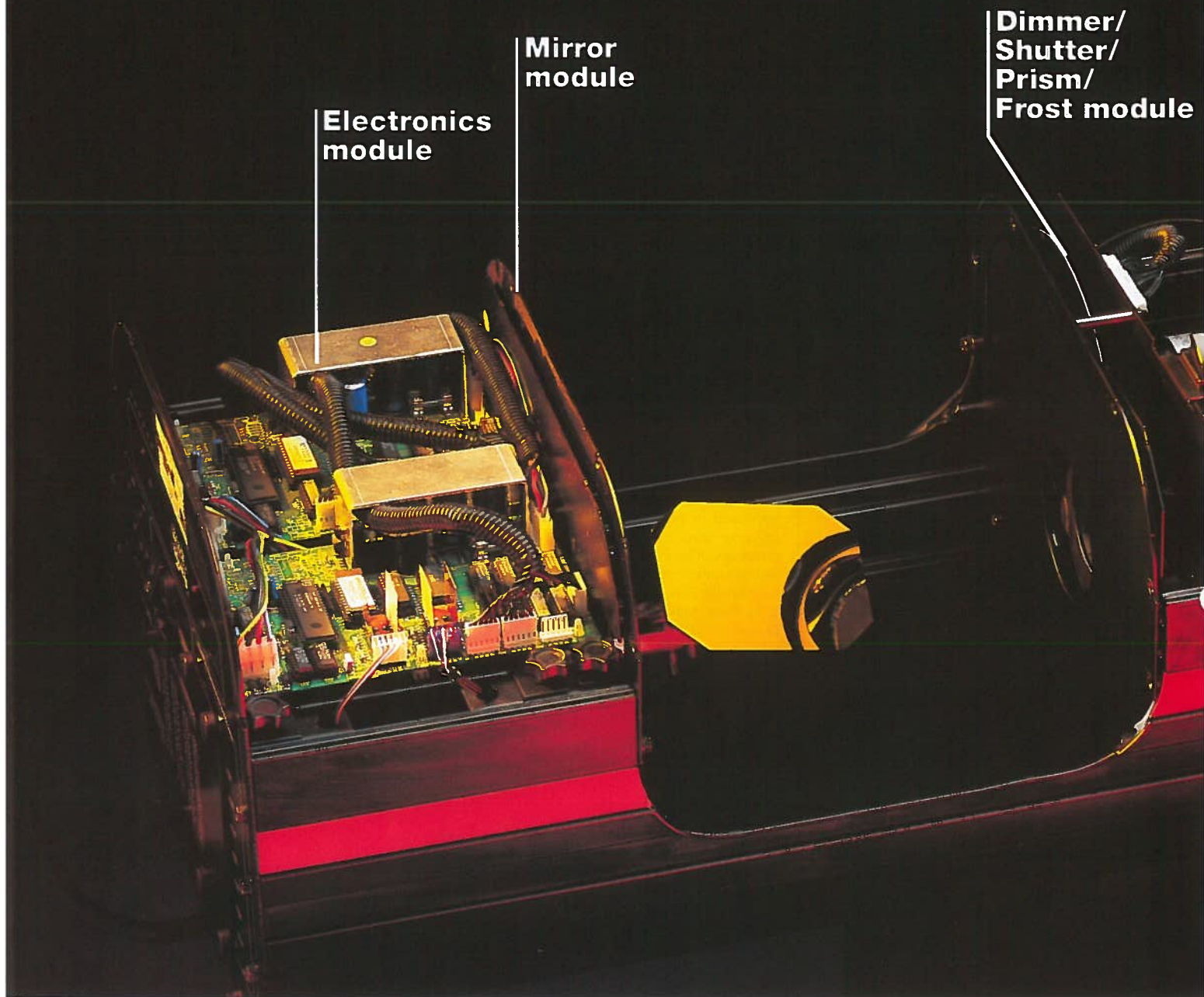
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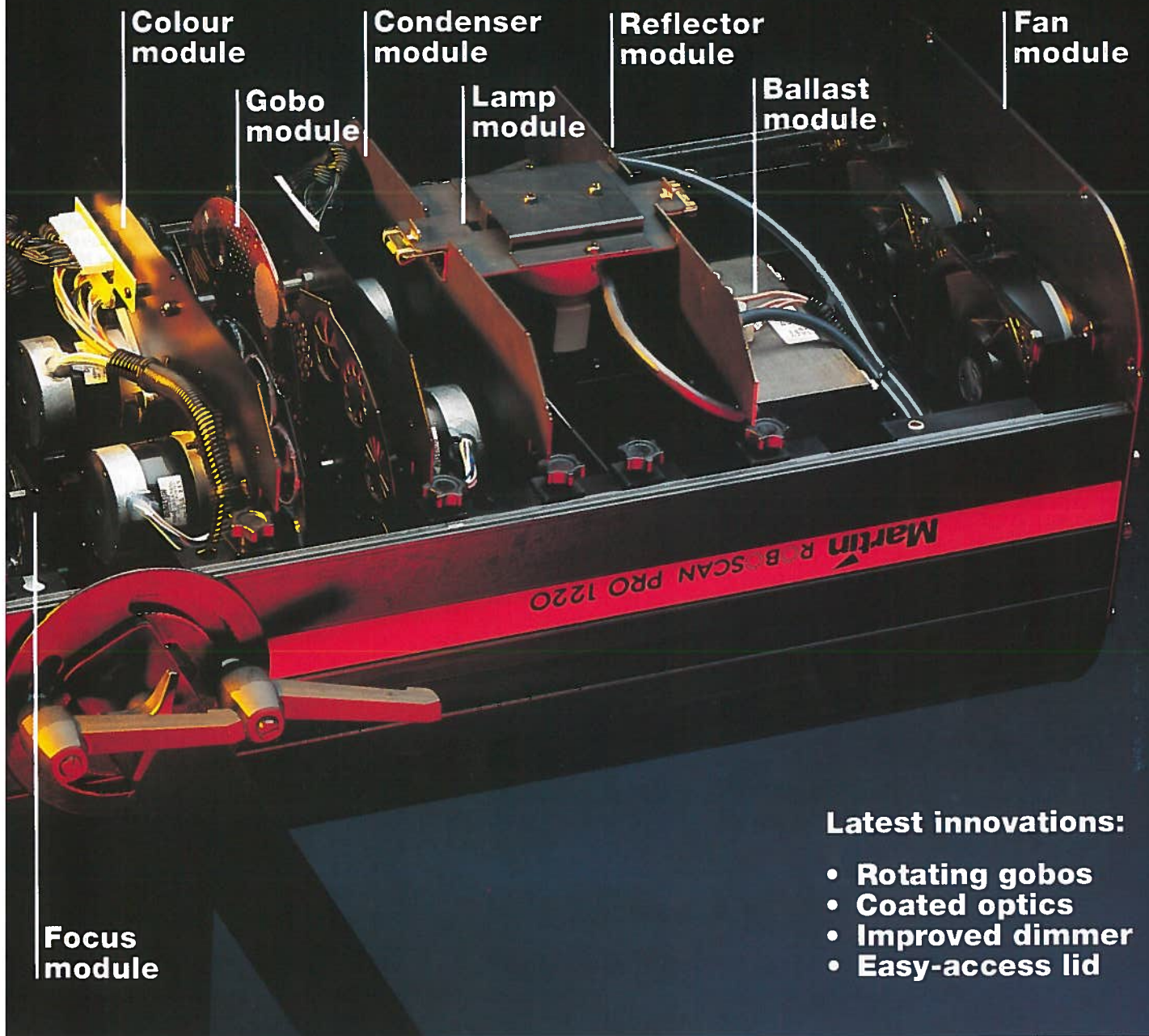
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Searchlight Co

The Searchlight Co is a new company set up by Design Line Lighting to separate its Space Flower searchlight hire activities from its traditional business of Design Line tubelighting.

The Searchlight Co will be increasing its stock of flight-cased Space Flowers which have been used to good effect at such diverse events as nightclub openings, D-Day events, fireworks displays and concerts. Space has been booked at the PLASA Light & Sound Show in September and also at the International Leisure Industry Week exhibition in Birmingham where full details of the searchlights will be available.

Meanwhile Design Line Lighting will continue to offer decorative tubelighting, chandeliers, safety stairnosings and ceiling tiles. Both companies are based at Bourn in Cambridge. The Searchlight Co can be reached on (0954) 718118.

ISCE Seminar

The Institute of Sound & Communications Engineers (ISCE) plans to present a one-day seminar on 'Voice Evacuation Systems'. Taking place on October 7th at the Royal Horticultural Halls and Conference Centre in London, the programme will include specification, certification, speech intelligibility, standby power and much more. The first paper commences at 10.00am with breaks for both lunch and afternoon tea. An open forum will round off the day's proceedings. This seminar will be of particular value to anyone responsible for buildings operations and services in the construction industry: fire, surveillance, security, mechanical and electrical, project managers, architects and designers. Full details may be obtained from the ISCE on (0628) 667633.

Architectural Highlights from Philips



Pictured above left is London's famous Tower Bridge picked out of the London skyline by an ambitious lighting scheme using Philips floodlights with metal halide lamps creating a variety of effects. A variation in lighting level has been applied to the two towers, which creates an exciting 3-D modelling effect. The lighting system of Hotel Okura in Amsterdam (right), again by Philips, consists of a line of neon at one corner of the building, lighting for the undersides of all balconies and a dynamic lighting for the roof-top canopy. The colour of the light for the canopy, acting as a 'visual crowning' of the hotel, changes in response to the output of a barometer.

Missing Link

Wigwam Acoustics recently provided 'the missing link' at a Hyde Park Christian Rally attended by over 90,000. British Telecom were left red-faced when they found themselves lost in the crowds at the 'March for Jesus' festival, which they should have linked up to a further estimated one million listeners across the world. Rising to the challenge Wigwam's Mike Spratt demonstrated his speedy screwdriver skills, adapting his own car phone to provide the international network.

"We had less than an hour to pull the stunt off, so it was a quick re-build job on my own hands-free unit to connect the PA system to our own mini-telephone exchange," Mike told L+SI.

Marquee Fiddler

Marquee Audio has supplied Theatre Projects Sound Services with various audio products for the 'Fiddler on the Roof' show at The London Palladium (see Asleep in the Stalls, page 51). The equipment consists of BSS TCS804 digital delay lines, a BSS FPC900 Varicurve remote controller, BSS FCS920 slave equalisers, Yamaha SPX1000 reverbs and Yamaha DDL-3 delays. Dave Perry, production manager at TP, told L+SI: "With the Varicurve remote controller, the sound designer is able to sit anywhere in the auditorium, on any level, and control all the equalisers situated at the desk position via a radio transmitter link which he can carry around with him."

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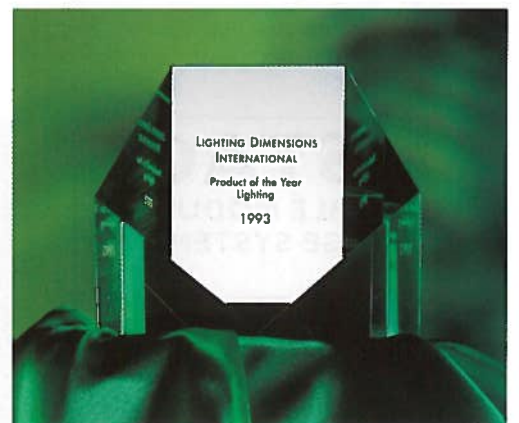
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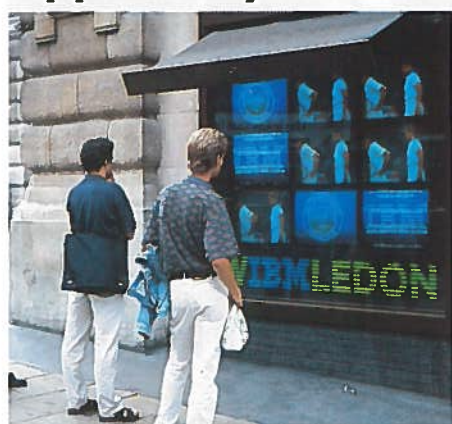
ABTT PAT Guide

The need for formal Portable Appliance Testing originated in the Electricity at Work Regulations of 1989. By mid 1993 it was clear that few theatre electricians or their managements understood much about these new duties. As a result, the ABTT has published 'Advice on Electrical Safety and Portable Appliance Testing in Theatres' in an attempt to demystify the subject and to relate the legislation to theatre practice.

Risk categories, frequency of testing, methods of testing, record keeping, use of specialist contractors, are just some of the issues covered by the publication, as well as guidance on where legal responsibility lies and defining 'competence'.

Advice on Electrical Safety and Portable Appliance Testing in Theatres is available from the Association of British Theatre Technicians for £10 (including p&p), telephone 071-403 3778.

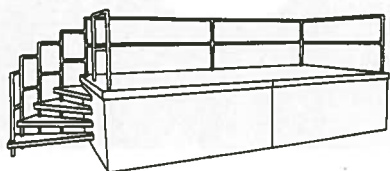
Window of Opportunity



A nine monitor videowall, programmed and installed by video resources company, Creative Technology, filled one of the windows of the Lillywhites department store in Piccadilly Circus, London, during Wimbledon's recent Lawn Tennis Championships.

Running 24 hours a day for three weeks, the Barco 2850 SCM videowall and Pic 3 controller displayed live satellite feed of action from the tournament, along with pre-recorded Betacam footage promoting the IBM scoring and information systems that were used at Wimbledon throughout the event.

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High and Mighty

LSD's recent contract to supply equipment for the launch of Blackpool's now notorious Pepsi Max roller coaster (see cover story last month) included a couple of notable firsts for the company and its special projects division.

In technical terms, the single tower of truss, 235 feet of LSD's own D2 heavy duty pre-rig, was the highest vertical lighting truss ever erected. Weighing in at over five tons its assembly posed several tricky problems. The tower was in fact pulled up in six pieces (complete with Golden Scans, Datastrobes and Par 64s fitted with Colormags) using two one ton Verlindes in tandem per section. Lead by Warren Steadman (rigger) and Steve Rustling (crew chief) the whole project set-up was completed in a day - no mean achievement for a first of its kind, especially when you consider that the crew (six men in total) also rigged the station area with a dozen Intellabeams and fitted 30 Xenon egg strobes, powered by batteries, to the rear coach of the inaugural train.

The ride features an automated flash photo device which catches the passengers at the point of maximum trouser brownout when the train is in almost total free fall and the LSD crew excelled themselves in this area too! Having exhausted their supply of free rides the crew forked out all their per diems to travel the beast no less than 37 times and they were variously photographed chatting on their mobile phones, playing cards, reading the paper and, on one occasion, Warren was actually caught smiling.

Dave Smith (special project manager) gets his fun by more devious means: "Me? Up there? You must be joking." Never one to avoid a challenge in the search for new contracts, Dave attended last year's Tory Party Conference in Blackpool for a couple of days (all those grey suits will take colour wonderfully darling), and whilst there took the opportunity to wander across to the Pleasure Beach and introduce himself. Helen O'Niell (marketing director) was suitably impressed and the Pepsi Max opening followed. Whether he can do something similar for the Conservatives remains to be seen.

Steve Moles

Magic at Mystery Lodge, US

Electrosonic Systems was part of the team that brought BRC Imagination Arts' Mystery Lodge to Knott's Berry Farm, near Los Angeles, for a Memorial Day debut. Electrosonic joined show designer and producer BRC and a host of suppliers, technicians and artists



for this magnificent illusionary attraction - a culturally accurate, inspiring and mystifying experience of the Native American West.

For this attraction, Electrosonic Systems in Burbank California, engineered, installed and commissioned technical systems including digital audio, lighting and show control. They also provided systems for a patented technology conceived by BRC to create the effects guests witness in the Mystery Lodge. As the live story-teller (shown in sketch form above) spins his tale, the smoke rising from his fire twists and shapes itself into the ghosts and characters of his story. The technology to make this possible, called Holovision, was first developed by BRC for Expo '86 in Vancouver, and has been substantially improved in the eight years since.

The Mystery Lodge is Knott's largest expansion since 1988 and reflects the park's commitment to inspire, educate and entertain. The £10 million adventure with its revolutionary special effects is one of the Knott's most technically advanced projects ever, and it was developed in conjunction with Native American leaders, based on traditions of the 'Namgis' people of Canada.

In design/development since 1991, the attraction sets very high standards for realism. Electrosonic was contracted to help support this realism with their effects systems, as well as a digital audio system. The company also engineered an advanced data-plus highway to network all the show systems, and provide automated feedback on show status.

Since its founding in 1981, BRC has earned many accolades as one of the world's most accomplished firms specialising in theme parks, visitor centres, world fairs and museums, and has won over 200 international awards for creative excellence, including two Academy Award nominations.

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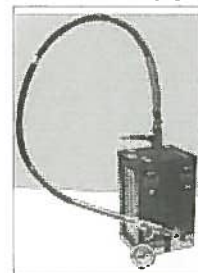
Examples of our fibre optics may be viewed at our London showroom, from subtle backgrounds to fibre optic fireworks. Leaflets available.



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MUSICAL NOTES

Robert Halliday looks at the current productions of 'She Loves Me' and 'Once On This Island'

'A musical'. What does that phrase conjure up? Most people would probably now associate it with large scale, mega-budget productions of the kind that Britain has become very good at producing in recent years. That the West End is still full of these shows - 'Cats', 'Les Miserables', 'Miss Saigon' and the like - demonstrates that there is still an insatiable demand for spectacle.

But 'musical' doesn't have to be synonymous with 'spectacle'. All it really means is a story told through music and, just as you can have a small scale play rather than a blockbuster Shakespearian epic, so there must be room for small scale musicals. American singer Barbara Cook possibly explained it best: "It's the difference between hearing a string quartet as opposed to a symphony orchestra."

Two productions have now appeared in Britain which set out to appeal to an audience looking for a good way of spending an evening. Both are American, one a transfer of a New York revival of a 1960's musical, the other a new production of a musical first seen off-Broadway in 1990. It is perhaps unsurprising that both shows should have come out of America - the huge production costs on Broadway must give smaller-scale shows an immediate appeal to producers. Yet, although neither has a block-buster budget, they show few signs of being in any way 'cheap'.

The first of the two shows, *She Loves Me*, is the older. Written in the early sixties with a book by Joe Masteroff (who also wrote the book for *Cabaret*) and music and lyrics by Jerry Bock and Sheldon Harnick (better known for *Fiddler on the Roof*, also enjoying a London revival) the show was last seen in London in 1964. Revived at the Roundabout Theatre in New York last year, the London production at the Savoy Theatre is a transfer of this new version, though with a new set constructed by Victor Mara Ltd, and a British cast led by John Gordon-Sinclair and Ruthie Henshall.

The story, as the title suggests, is a simple one. Gordon-Sinclair is an employee at a Parfumerie. Henshall arrives and hustles a job. Both spend their spare time writing to pen friends they have never met. And, surprise, each is the other's pen friend. There are a few plot twists and comic moments along the way, but they end up falling in love, which sounds corny, but the show is quite beautifully written, with every one of the principal characters



Tony Walton's set for *She Loves Me* with the revolve closed off by the curved truck units.

adding something to the story. And it is written as a 'traditional' musical, with separate dialogue and songs. The only confusing aspect is that the programme states that the action takes place in Budapest in 1934, yet the cast

"Both musicals are triumphs in the production of high quality, intelligent shows to the highest possible standards within a realistic budget."

speak with American accents and, apart from that programme note, we might as well be somewhere in New York.

The show's design, by Broadway veteran Tony Walton, is near-identical to the set produced for the Roundabout Theatre - a small, studio-type space with a lighting grid rather than any flying facilities. Knowing the nature of this first venue makes the reasoning behind the design clear; without any flying facilities all scenic transformations had to be accomplished in some other way. And without any wing space, things had to be compact.

Walton's solution was the use of a centre stage revolve divided into three areas. The larger of these contains the interior of the

Parfumerie with five serving tables and, in the centre, a spiral staircase up to two offices. The other two areas serve as the shop's stockroom, a bedroom, a hospital room and a restaurant as required. The band sits over the upstage half of the revolve, while the revolve can be closed off altogether by two curved panels which slide around its outer edge to form the outside of the shop front - electricity is fed to these from a tracking ribbon cable system rather than from a pile of multicore sitting on the floor as in New York. The whole thing is very well detailed and provides a neat, practical way of moving from scene to scene and location to location.

Just as Walton's set was transferred 'as was' to allow the production to move to England as quickly as possible, so was Peter Kaczorowski's lighting design, helping to explain its heavy use of Lekos and a complete absence of moving lights. Yet even without automated toys, the rig still makes everyone who sees it gasp. Stand on stage, look up and all you can see is a solid roof of black lanterns, sloping down from beyond the proscenium arch to the back of the stage above the band. The kit list starts off with 249 Lekos, 36 Cantata 18/32 profiles, 38 Cantata fresnels and 60 ways of dimming, and that is in addition to the theatre's own stock of Cantatas and Parcans and 254 house dimmers.

The man responsible for getting all of this working was production electrician Gerry Amies. His first introduction to the rig came with a plan showing only lamp positions. He remembers it "spoiling my whole weekend - just thinking that every one of those crosses was going to turn into a lantern!" Amusement did follow though, when members of the Theatre Projects Consultants' team were in the Savoy when Amies recited it for the show; he was able to ask them why they'd only specified six circuits on each circle front - Kaczorowski's plot called for around 30 lamps on each circle! Extra bars had to be installed to cope, with circuits run round from on-stage dimmers.

Methodical planning followed to ensure that all the equipment could be fitted into the theatre's confined space. "Everything was carefully prepared at White Light," Amies recalls, "all



The music box featured in the show was modified by Anograph to contain a radio receiver and loudspeaker.



John Gordon-Sinclair and Ruthie Henshall in the lead roles.



For 'Once on this Island' Kendra Ulliyart has created a huge performing space backed by a wrap-around cyclorama. The central circular area and spiral revolve only once, and even then rotated by hand.

numbered by bar and unit, and with all of the colour sorted by bar, so we didn't have to go hunting for gear all over the theatre. Apart from the odd blown bulb, everything worked in the right place and in the right colour first time."

For the downstage area, which has five full electrics bars crammed into the space between the proscenium and the first row of seating, a custom lighting bridge was built by Robert Knight and suspended from the rigging points installed as part of the theatre's restoration. The bridge has a fully trapped floor, allowing safe walk-long movement combined with easy access to any lantern for focusing or the inevitable replacement of blown lamps in the Lekos. Amies does, however, recall a nasty moment at the start of the focusing session. "I'd decided to save some height by leaving the hook clamps off the lamps on the bridge and bolting them straight to the bars. But when we focused the first two lamps and they knocked into each other I thought I'd really blown it. I could just picture myself having to order several hundred hook clamps!" The problem was overcome simply by repositioning a couple of lamps, much to Amies' relief.

The rest of the on-stage rig was focused from flown focusing bridges without too many problems, apart from the heat! Amies, Savoy chief electrician Viel Richardson and their crew were particularly impressed by Kaczorowski's ability to focus with several electricians at once which, combined with the quick-to-focus Lekos, led to a relatively short focusing period. The show was also lit quickly, once the 300 move-based cues on the American printout had been transferred into states and fed into the Savoy's Strand Galaxy Nova.

The result of this careful preparation, with everything down to gobo holders sprayed matt black (and even the ubiquitous White Light logo sprayed out!), is that, despite its size, the rig does look very neat - as is the lighting produced with it, though it somehow has a very 'American' feel to it. The rig is so large because every lamp has a specific purpose, as tight specials or washes in different colours, different gobos or into different areas on the revolve. While lighting the show, Kaczorowski worked from 'magic sheets' showing only the lamps he'd specified for each scene - Amies notes that "if we saw him reach for the plan, we knew

something was wrong." The focus is beautifully clean with the huge number of top-hatted Lekos and absence of any kind of smoke or haze keeping flare down to an absolute minimum.

For much of the time, the principals in a scene are picked out in hard-edged followspots from the Savoy's rear-auditorium spot box, yet the heavy use of low frontlight hides the intrusive circles from the spots, while at the same time getting under the hats many of the gentlemen wear and rendering eyes highly visible. And while it is 'mood' motivated - pinks and ambers for the warmth of the shop, cool blues for the winter scenes when love isn't working out - it is non-naturalistic, on occasions dropping down to a leaf break-up backlight inside the shop stock room, and with slightly-too-obvious 'bumps' at the end of songs. Above all, it is very even; many of the lamps are paired, and scenes

"Sound in all musicals should be like this. For the first time in a long time I could clearly understand every single word that was spoken or sung on the stage."

are almost always equally lit from both sides. The result is a cleanly, prettily lit show that is easy to watch but which somehow lacks excitement. But then, this is not meant to be an exciting, spectacular musical.

The show's sound is very like its lighting - clean, fuss-free and easy to follow. Sound in all musicals should be like this. Sadly it isn't, and that makes Terry Jardine's design for the show a major triumph. For the first time in a long time I could clearly understand every single word that was spoken or sung on the stage.

Jardine, designing the sound for Autograph and one of the few members of the production team not brought over from America, credits part of this clarity to the show itself, with its good, clear book, strong cast and high quality orchestra. The rest is down to the hard work and care of Jardine and his team. The design is based around a 49-channel Cadac A-type desk feeding out through a mixture of Meyer UM, UPAs and UPMs, with JBL Control 1s for the circle delay fills. Signals arrive from 12 Micron radio mics on the cast, and a variety of microphones carefully close-micing the band. However, added to this is a PC running Matt

McKenzie's MIDI control software, which is used to alter delay times and even shut parts of the system down depending on what is happening on stage, songs being given more level into the proscenium loudspeakers than dialogue. The rest of the quality comes from the careful positioning of loudspeakers, even though Jardine did have to stand firm about that at times. "My only regret is that we couldn't hide the proscenium speakers better. We were asked to move them at one point, but I had to say that they would work best where they were and I got my way."

The team's care extends beyond the audible results. The radio mics, for example, are completely invisible on the cast. Jardine credits this to the care taken by sound no.2 Amanda Davies. "When actors go out to get their hair cut, she insists that they bring her packets of it back," Jardine explains. "She then grafts them onto the mics so that they're more hairpieces than microphones."

The other example of their effort is the musical box in the show. In New York the music from this box was simply replayed from the main sound system. Jardine decided to make it more realistic, and Autograph engineer Tony Robinson managed to cram a receiver, amplifier and car speaker into the box. The sound is sent from a transmitter in the wings and appears from the box. The attention to detail pays off, and Jardine, along with assistant Chris Full, operator Borneo Brown and the aforementioned Ms. Davies deserve the highest praise. The 'string quartet' description fits this show perfectly; it is a delight to watch. It could have been ruined by heavy-handed sound. It isn't.

She Loves Me's fellow American show became diverted en route across the Atlantic, landing up via the M6 at the Birmingham Repertory Theatre. First produced off-Broadway in 1990, *Once On This Island* is based on the novel *My Love, My Love* by Rosa Guy and has been 'musicalised' by Stephen Flaherty (music) and Lynn Ahrens (book and lyrics). Its Broadway transfer netted it eight Tony award nominations and brought it to the attention of Imagination Entertainments who, following the old cliché, liked it so much they bought the show, or at least the right to present it in Europe. However, to distance themselves from it - they are merely acting as producers, rather than the design role they played on *Copacabana* earlier in the year - they decided to co-produce it with the Birmingham Rep, in a production co-directed by the Rep's associate director Gwenda Hughes and acclaimed choreographer David Toguri.

The show's plot is, again, seemingly basic - young girl falls for man from different class, but discovers he is already promised to another woman from his own class. But the location, on the French Antilles, and the mystic overtones, wherein the young girl, Ti Moune, is sent on her journey by the Gods to test the powers of love against death across the divide between the landowners and the peasants, adds an extra dimension to the show. It's style is more modern than the sixties-written *She Loves Me*, being entirely through-sung. It also seems more derivative, with snatches of the music seeming briefly familiar from other recent musicals.

Performed by a cast of 11, the show is tremendously lively and energetic. To give this energy room, designer Kendra Ulliyart has created a huge performing space, building the Birmingham Rep's already-vast stage upwards and outwards so that its front edge is level with row D of the auditorium. In this space she has created a tropical playground, with wooden



LD Hugh Vanstone's rig is an eclectic mix of lamps with profiles, fresnels, every kind of Par lamp, Aeros, 5k fresnels and even three PALS remote-controlled PC units all mixed in together.

huts on either edge, giant trees, small water pools, a central, circular mossy-area surrounded by a spiral which curves up into the air. The whole thing is then backed by a wrap-around cyclorama. Given Imagination's involvement, the biggest surprise is how long you wait until the central circular area and spiral revolve. They do, eventually, but only once, and even then rotated by hand. Several Imagination staff members attending the first night expressed mock-surprise that this area didn't rise to the heavens as well!

Above this acting area is another huge battery of lanterns, though the size of Hugh Vanstone's rig is understandable given the area he has to light - indeed, Rep chief electrician Tim Mitchell's comment is that it "isn't actually that big for this stage". But the rig is also something of a demonstration of the current differences between British and American lighting methodologies. Vanstone's rig is a far more eclectic mix of lamps and angles than Karczorowski's, with profiles, fresnels, every kind of Par lamp, Aeros, 5k fresnels and even three PALS remote-controlled PC units all mixed in together. The followspots are again conventional, hard-edged units (made by Teatro), but one is placed high above the cyc on stage left with the other two in a high FOH bridge.

The eclecticism continues into the way the show is lit. In one scene, for example, a 5k fresnel doing a high side/backlight is backed up by a group of Parcans doing a steeper backlight, and another group filling in a contrasting colour from the other side. And where Karczorowski strove to keep his beams invisible, Vanstone relishes in seeing them, using sensitively handled haze and smoke to highlight the shafted light from the gobos in the backlight profiles. Even the lighting 'toys', which on some occasions can just look plain naff, are brought off with assurance here - two gobo rotators add sparkle and magic to a ballroom scene played out in the central acting area, and a ring of Aero downlighters around the set's rising spiral look glorious as they pick out cast members standing there.

Given the completely different natures and designs of *Once On This Island* and *She Loves Me*, this comparison in lighting may not be completely fair, but the lighting on *Island*, while keeping the cast visible as the lighting for *She Loves Me* did, somehow adds an excitement and energy of its own. And all that achieved with limitations and compromises



Good use was made of the cyc with tubular ripples, VSFX storm cloud effects, a star cloth and even a sun and a moon projected using gobos.

imposed by the show. The all-black cast, for example, meant that every colour had to be carefully considered for its effect on the darker skin tones. The raised stage meant that front-lighting the downstage area of the set without clipping the front rows of the audience became hard - Vanstone resorted to focusing the lamps in 'sweeps', effectively sidelighting the far corners of the stage. And the wrap-around cyc cut down on sidelighting opportunities, and meant that when sidelight or uplight was used it threw large, distracting shadows onto the cyc. Vanstone clearly judges this distraction worthwhile given the effect of the light on the cast, and made good use of the cyc at other times with tubular ripples, VSFX storm cloud effects, a star cloth and even a sun and a moon projected using gobos.

Control for the rig was from the theatre's own Galaxy 3 desk and a mixture of PIP and LD90 dimmers, and the majority of the rig was drawn from their house stock of old Sils, newer Cantatas and Strand scrollers run through DMX. Additional equipment, mainly the 5k fresnels, 5k scrollers and assorted effects units, was supplied by White Light.

The show's sound design was by another

Imagination regular, John Del'Nero and, as with Vanstone, *Once On This Island* followed on very closely from his commitments on Copacabana. Both, however, knew the show and were "very, very keen to be involved with it".

The similarities between the sound on *Island* and that on *She Loves Me* are again quite pronounced. For starters, the band on *Island* are also away from the conventional orchestra pit location, sitting off stage behind the cyc. Del'Nero admits that he is "quite fundamentally against this, since it means that the band aren't in contact with the show - especially on a repertory production such as this, which hasn't got the most sophisticated communications equipment". Budget constraints also meant that he was limited in other areas, with the rig being composed largely of the theatre's own equipment controlled from the house DDA 32-channel desk, though some Meyer UPAs were brought in from Autograph to supplement the Rep's JBL column speakers and Turbosound central cluster.

However, despite equipment limitations, Del'Nero worked hard to achieve his goal of making the sound appear to come from the stage area, even though the cyc limited the positions available to locate speakers upstage centre. He worked round this by "using some very funny delay settings, and also by using a reflector system upstage". The result is a very 'spacious' sound, especially from the band whose sound appears to emanate from all the way around the cyc. The vocals emerged from in front of this, with the balance between band and vocals being very well maintained throughout by operator Janie Milligan.

Where *Island's* sound is less successful than *She Loves Me* is in its visual details - while most of the loudspeakers are well concealed in sacks or in the trees, the radio microphones aren't. Part of this is undoubtedly due to the fact that the cast get to within a couple of feet of the audience at times and part due to budget constraints; Del'Nero attributes the problem to the fact that many of the cast went out and had fairly severe hair cuts shortly before the show opened. Whatever the reason, they remain a distraction throughout.

But apart from that, the show is a triumph. It is short, running for just an hour and a half without an interval, but it had the audience's full attention at all times and, if the Birmingham Rep's auditorium wasn't so steeply raked, would probably have had them dancing in the aisles at the end. There is talk of it moving to London, though the set would need considerable re-working to make it fit into a West End theatre. And that will be interesting, because though the set adds to the show, much of the action could stand without it. Dan Crawford of the King's Head theatre was heard to remark that it would make a brilliant fringe show, and it would - the transformation of people into Gods or, at the end, of the heroine into a tree, are achieved by the simplest of means, and the story is basically narrated by the cast.

It is the strangest contradiction between the two shows - *She Loves Me* would look very peculiar without a set, even though the set doesn't really define the global location of the show. *Once On This Island's* set does define its location, but so does the show itself. It would work without the set, provided it retained the largely excellent cast it has. Both musicals are triumphs in the production of high quality, intelligent but 'light' shows to the highest possible standards within a realistic budget. That probably takes more work than achieving a cost-no-object blockbuster. And for achieving that, all involved deserve the highest praise.

ON TOUR

by STEVE MOLES
AND PRODUCTION NEWS

Crowded House Whitley Bay Ice Arena LD: Steve Swift SD: Bruce Johnston

Crowded House are a bit like Squeeze. Although they produce well structured pop songs with a strong narrative content in the lyrics, they seem anonymous. In the words of lighting operator Dave Harding: "They are the victims of their own success; nobody's heard of them, but everyone knows their songs." Having said that, there was no shortage of people at the Whitley Bay Arena who knew exactly who they were.

This is the band's first tour in arena-size venues and it was reflected in a certain over-familiarity with the crowd. Club style repartee, self parody and disparagement were used to charming effect and quickly endeared the crowd to the band, but after this device had been employed three or four times it became unnecessary, dull and out of place. However, the musical quality more than compensated for this and surprises like the 30+ Maori singers and drummers who joined the band for the latter part of the show, rounded off a thoroughly good evening's entertainment.

SOUND

Bruce Johnston has been mixing front-of-house for the band for just six months. With strong budgetary pressures determining the contractors for the European part of the tour, he chose a Flashlight system from Britannia Row. And he's not complaining, although he did have one wry observation to make: "This PA is not very forgiving; if the band are playing badly you will hear it." There was a great deal of PA for what is a relatively small arena - an eight wide two/three cabinet deep flown cluster each side with a correspondingly large stack on the floor beneath, although most of the floor cabinets were sub bass. The bass only made its presence felt once the Maori troop arrived, and then that powerful and emotive sensation that only authentic native drumming can evoke, came pounding through.

This typified Bruce's approach to the mix. Just because the equipment was there didn't mean he had to blow our heads off with it - but when occasion demanded he used it. Mixing was from a Yamaha PM4000 which Bruce prefers: "I find it quicker to work with," whilst the stage monitors were mixed from a Ramsa 840 by Paul Le Page. Bruce uses compressors on just about everything: "I'm using a lot because Crowded House are a natural sounding band and this keeps everything level. For instance, it keeps the guitars relatively loud and gives them a fuller sound." And that was probably the lasting impression of the show sound wise; it seemed loud but rarely was.

LIGHTING

Lighting for the band has traditionally been by Steve Swift, but on this occasion it was a co-effort between Steve and Dave Harding who is lighting operator for the tour. As Dave explained: "Steve concentrated most of his efforts into designing the set and stage with Noel and Sally Crombie while I was left pretty much to take care of the lighting." The set comprises a system of risers across the stage dividing the front and rear areas, with a further higher (4-5 feet) split level platform across the back for the Maoris. Hanging from the rear truss are a set of six white columns made from tubes of muslin stretched over various sized hoops



Column inches for Crowded House at Whitley Bay Arena.



"Crowded House are the victims of their own success; nobody's heard of them, but everyone knows their songs."

(generally between one and two feet in diameter). Visually these tubes resembled abstract vertebral columns. What was nice about them was that for a large and prominent feature, the columns collapsed down at the end of the night into near briefcase-size piles. Lighting was supplied by Vari-Lite.

Two shallow V-shaped trusses front and rear held most of the lights, while hidden at the back was a small rectangular box truss to support the columns and a white cyc and tab system with associated lighting. The main lighting came from 18 VL2Bs, five VL4s and 24 VL5s, with just four 4-lamp bars of Par narrows on the trusses. On stage, mounted on Manfrottos, were four Bambinos fitted with Rainbow scrollers and barndoors, whilst hidden behind the floor PA at the front were four 16mm movie projectors. Dave runs all the lighting from an Artisan console and is obviously a confident and adept operator. During 'Four Seasons in a Day' he astonishingly quickly and effortlessly dialled out, rectified and dialled back in a wrongly coloured Vari*Lite.

Great use is made of the columns during the show - as well as being lit by stage wash they are lit from within by VL5s at both top and bottom. Using the different sources and multiplicity of colour combinations available, the eye was drawn variously up and down the stage, sometimes a fantasy of different coloured columns, sometimes uplit only in a dark saturated hue that cast deep shadows around the hoops. This drawing of the eye was reinforced again by the movie projection when the white cyc was exposed: a film loop of an aerial shot of a solitary man walking endlessly round and around a town square was mesmerizing. Dave also projected Vari*Lite gobos onto the cyc, once resorting to the so called 'Brain' gobo which I thought nobody used any more because of its ugliness, but in fairness this swept rapidly off the cyc and out into the audience before ending up on the roof.

The 5kW Bambinos were used exclusively for cross-stage wash on the band, and the lamps are a favourite of Dave's: "I prefer the fade of the fresnel to a Mole 8-Lite; it's much slower and not as sharp as the Moles, and you get a nice orange hue when you use them at 50%." Not limited to always providing a lighting backdrop one song 'Systematically Waking up the Dead' was performed in open white only, with just the 5kW's being used with some help from the four long-throw Lycians out in the house. The show, despite the strong visual aspect at the rear of stage, was predominantly dark, perhaps in response to many of the songs which are whimsy and melancholy in nature. However the band, particularly the singers, seemed underlit at the expense of the backdrop. It was noticeable, for instance, that the Maoris up on the risers at the rear were brighter than Niel Finn and the rest of the band at the front.

Crowded House have, thanks mainly to the talents of Niel Finn, a repertoire of well crafted songs. Unfortunately they all seem very similar in character and to some degree in construction. In terms of their performance they lacked contrast; there was no light and shade and the meter of the performance neither rose nor fell (with the exception of the appearance of the Maoris). A couple of numbers with some real 'bollox' might go some way to getting people to remember the band's name as well as their songs.

Jackson Browne

York Barbican

LD: David Davidian

SD: Buford Jones

"A Jackson Browne show is about bladder control" - at least that's what Kurt Johnson, who's running the light show, said. He was, of course, talking about the duration of the performance - two hours or more depending upon requests from the audience - and that at York Barbican was no exception. What was strange though was that the York audience seemed determined to validate Kurt's point. For the first hour of the show each break between songs heralded the exit of at least 40 people for the call of nature. Sure, the crowd were loud and unabashed in their support for Jackson, but hardly beer sodden. Thankfully, there was more to this show than keeping your legs crossed.

SOUND

Buford Jones, perhaps better known to readers of this magazine for his work on Pink Floyd's 'Momentary Lapse of Reason' was mixing the Britannia Row PA on a new ATI Paragon 40-channel console. The Paragon is unusual in that it has both noise gates and compressors built into every channel. Despite this the board is barely larger than any comparable desk, certainly no wider, and with the far reach of the controls cranked up some 20 degrees off horizontal, is no deeper either. Buford wanted the console for two reasons: "This is the third model I've used now and the EQ and sonic quality is very good - it's a quiet and clean board. The top rows are a little hard to reach, but as they are for the gates and compressors I hardly need to touch them during the show. Secondly, we are recording every show and the patching system was made for this console and the mastering and layout of the board is good for recording purposes - there's no need for a second console. I can't monitor the 24 track recording audio-wise, I can only rely on what the meters tell me and because I'm used to the desk I know exactly what that is."

With much of the usual paraphernalia of effects racks contained on board, the mix area was remarkably confined, despite the three VHS 8-track recorders and controls. What off-board equipment Buford did use - delays, timers and MIDI - were controlled from a Mac Power Book. "Jackson has a big repertoire and I've loaded the settings for most songs into the Mac and I just have to select the right one. I've also set it up to keep a diary log of the recordings."

For anyone interested, Buford is thinking of marketing the programme next year. The PA is all wide angle Turbo Floodlight - on this occasion 12 cabinets per side (six bass, six mid/high) all floor stacked either side of stage. Although Buford normally uses a Sound Image PA, and this is his first tour with the Turbo system, he is very pleased with the performance. In fact, he has mixed for



Simplicity is the key for Jackson Browne.

Jackson for 25 years now and could probably make him sound good through a Dansette. Monitors were run by Billy Szocska on a Midas XL3, and assisting front of house on recording duties was Kevin O'Dwyer who managed to break his leg on the first day of the tour. Fortunately for him, in a display of great generosity, Brian Grant of Brit Row decided to keep him on the tour and add another member to the PA crew.

LIGHTING

The lighting system was designed by David Davidian. Jackson is a performer like Van Morrison - people would come to see him perform in a garden shed by candle light. David has therefore designed a very basic conventional rig. Supplied by Supermick, the system comprises three trusses, front, mid and rear, with four Lycian followspots front of house. The trusses support some 180 Pars (64 of which are ACLs) and 52 ellipsoidals with a further 20 Pars on the floor behind the band. For Kurt Johnson, who is running the show, the simplicity of the rig has been a bit of a bonus: "David asked me to cover the shows for him in Europe and recorded the show on an Avolites QM500 in the States. Supermick only had a QM 180-way available and the discs won't transfer. Fortunately, the tools that David had given me were good, I just had to remember verse/chorus, verse/chorus but the learning curve for the first show in Glasgow was pretty steep."

Kurt, although having designed for Crystal Gayle and Heart in the past, has not toured since 1982 and, considering this was only his third show, he acquitted himself well. He uses the spots very much as an adjunct to the rig, sometimes having the operators dowse them to 30/40% output, which works well as this is visually a very

low key show. All the spots have minus 1/2 green in them, something Kurt has gleaned from his work in the movies: "The Lycians are a completely different colour temperature from the Pars - the greenish cast is disturbing as well as making the spots look too obvious. I always try to keep any part of the green spectrum out of the performer's eyes." Because of this he's had to make some changes to the spot colours, the 181 to a 180, double to single bastard amber, and Rosco 68 to Gam 835 - this latter again because "the Rosco blue has green in it, whereas the Gam doesn't."

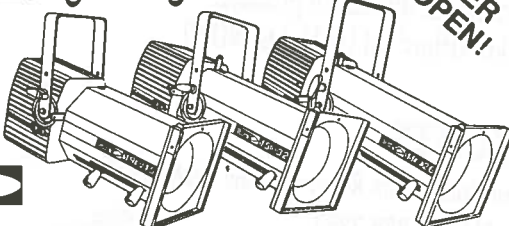

The stage is flat and unattractive for lighting - low risers six to eight inches for the drums, keyboards and percussion across the rear, and a motley assortment of old Vox AC30s, Marshall cabinets and such like dotted around. Jackson's guitar roadie Kevin Buell (famous for being the man who always catches Bruce Springsteen's guitar when he hurls it off stage in his more exuberant moments), is corralled stage right by 17 guitars, with another ten on stage left. Lighting is limited to wash, with some key light on each musician, and to be fair that's all that's required, although for my own taste I thought the whole stage could have done with being brighter.

The show actually ran for two and a half hours and the rush for the loos tapered off about halfway through the performance. One irony was that Jackson mistook the activity in the auditorium between songs to be an expression of dissatisfaction with the sound. He publicly admonished Buford and encouraged the audience to air their opinions to him directly. Buford, in turn, robustly avoided touching a single knob or fader for the next two songs whereupon the crowd all agreed with Jackson that the sound had in the interim, improved immeasurably. Hear, hear!

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NOT WHAT IT SEAMS

Ruth Rossington goes underground in Lullaby Tunnel

Over the last few years the Dearne Valley, in South Yorkshire, has undergone dramatic industrial and social change. A sense of defeat has hung over the area following the year-long miners' strike to resist pit closures, and 10 of the 11 local pits have now closed - whilst the process of deep mine closure continues unabated in surrounding coalfields.

The original idea for an opera based in the community and celebrating its heritage came from David Beresford, the producer, who started work on the project four years ago - the result was Lullaby Tunnel, and the ultimate result was a performance which took place at the end of July. It was, without doubt, the largest community opera ever to be seen in the UK, featuring the 300 voices, young and old, of Dearne Valley Opera. It celebrated, not only the triumph of hope over adversity, but also the wealth of musical talent in the area. The cast list was made up of 120 children, four male voice choirs, a ladies choir, the Grimethorpe brass band, a swing band, a string quartet, a jazz singer, 20 soloists, the principals, and 20 non-singing actors.

The opera itself is based on events which took place over 50 years ago. The Barnburgh pit story is at the edge of every miner's nightmare - being buried alive. On Friday 24th of April, 1942 a violent underground upheaval at Barnburgh Colliery in South Yorkshire buried 14 miners alive and three others were killed in the crush. The 'heave' was felt on the surface for miles around. It was an horrific incident never before recorded in mining history and rescue teams set out with no real hope of finding any of the lost men alive and, for their part, the trapped men had no means of indicating that they were still alive. Their plight was accelerated by the lack of food, then water, then light and with only their own urine to drink, their spirits faded.

A human chain of rescuers, 40 men lying on their stomachs passing excavated material back out of the pit hand to hand, made slow progress through solid ground, sometimes moving past the dead bodies of their luckless workmates. After days of being trapped underground the men resigned themselves to their fate, and as is tradition when there is no hope left, took off their boots and lay down. Like a father with his son, the oldest miner of the group removed the boots from a boy of just 17. Then, at the critical moment came the tap, tap, tap of the rescue party and those trapped were pulled from the pit.

This might not be the usual fare for mass entertainment, but nobody can deny the compelling nature of the subject matter. Against this background the staging of the opera was obviously going to be critical. It was always envisaged that it should take place at a pit and in view of the rate at which they were being closed, a decision was taken early on that the pit should be Hickleton Main, Thurnscoe.

Although closed in 1986, the two winding wheels remained as the shafts formed a part of the ventilation system for the nearby Goldthorpe pit. Much of the site had been cleared of supporting



Photos: Ray Wooding.



buildings leaving a large open area. Negotiations started with British Coal in late 1991, with permission granted for the performance shortly after.

The actual production itself was not without problems and it faced financial setbacks early on. September 16th, 1993 was to have been the opening night, but due to a funding problem this date was abandoned in favour of July this year. The postponement left British Coal with a dilemma. As the nearby Goldthorpe pit had by now closed, they had to fill the shafts of Hickleton to prevent gas build up and escape. The normal procedure would be to demolish the winding gear, remove salvageable metal and use the left over rubble to start the shaft fill.

Meetings between the opera administration and British Coal resulted in the filling of the shaft through a hole punched in the side. The work was completed in May of this year, the final touch being a clay plug to prevent gas seepage. The site was now an open area, complete with winding gear and amphitheatre.

The first priority of the production team was to get power to the site, the only available

source being a remote building some 500m from the performance area containing a 11kV supply. Silent generators were considered, but with a possible four week build in prospect, the cost was prohibitive. The solution was to get hold of a transformer which would provide the three-phase supply required. Once again British Coal came up with the equipment, together with the cable to run the three separate 200 amp three-phase supplies to the lighting towers. The local electricity company installed the distribution system enabling both the

lighting and sound systems to have their own supplies. With the site now ready, the next stage was to bring in the creative people and let them get on with transforming the area into an a performance arena.

SOUND

The first approaches to B&H Sound Services of Sheffield came in the middle of May, and the initial specification was for a system to cover an audience of 1500, with a requirement for six radio microphone systems and sufficient other equipment to adequately reinforce the long list of participants.

At a further site meeting at the end of May sound designer Andy Baker of B&H met with Simon Beresford, the set designer, Chris Clayton, the lighting designer and other key personnel involved in the production. The site transformation had started, turfs were being laid on the banking which formed a natural amphitheatre in front of the winding gear, and chalk marks and plastic cones showed where the stage and lighting would be. It was becoming apparent at this stage that there would be a tower at either side of the stage for the lighting, and a further tower at the rear of the grassed area, also for lights.

Andy Baker decided that even though the two front towers were farther apart than he would have liked, a cluster of speakers at the top of each tower, supplemented by further front-fill speakers, should provide sufficient coverage. Subsequent work with the site and stage plans

confirmed that coverage would be adequate, but would the set design and/or stage direction present any further problems? Corrugated iron was mentioned in abundance and no one at this stage was quite certain where the ladies chorus and string quartet would be located. It also became apparent that more than six radio mics would be needed and so a bevy from Sennheiser, AKG and Shure were drafted into service.

At a further meeting in June, the final positionings were resolved and it became clear to B&H that a minimum of 10 radio microphone systems would be needed, with the micing list showing how the remaining mixing channels were utilised. It was also clear that the





them in order to be trapped, took place when full darkness had set in.

With only a fortnight to go his budget was cut by 40%, and it was only through the good graces of White Light, who supplied all the lighting, that Chris was still able to employ some of the effects he had set his heart on. This however, was the least of his problems. It wasn't until the Tuesday night prior to the first performance on the Thursday that he actually had a clear idea of where performers would be positioned. Chris, and his team of production electrician Dave Robinson and dimmer man Alex Day, worked through the night lighting an empty stage, only

various musical elements of the production would need 'keeping together' so a simple, yet flexible, foldback system was specified. Final plans were put in place, micing and loading lists were created, and the project was ready to roll. In addition to the normal equipment specified, tarpaulins, bin liners and spades were added to the list of essentials!

The funding and sponsorship problems led to various telephone conversations between administrator Steve Walmsley and Andy Baker, but by this time B&H were hooked on what promised to be a very interesting project. The budget restrictions also meant that the stage set, lighting towers and site layout were still to be finalised, and plans changed once more when the director Alistair Campbell fell ill and Steve Dexter was brought in with two weeks to go - he was the third person to take on the job.

The sound get-in started at 10.00am on July 18th. By 11.30am the six crew were already commenting that it was the most hostile environment they had ever rigged in. Wheeling cases over rubble is not easy, and running cables so that mechanical damage is avoided takes a considerable amount of time - six B&H crew including front of house engineer 'Julian Stanford and radio mic technician Steve Hartley, plus locals, took all day to do what would normally have been completed in a couple of hours by two or three people.

The original plan for the front of house system could go ahead - four Meyer UPA-1s were positioned on the top level of each of the front lighting towers, with their associated amps and controllers being placed on the lowest level, together with a Meyer USW sub-bass enclosure. However, the director had chosen to position the string quartet on the lower level of the left hand tower so the USW had to go on the grass underneath the tower and the amps had to move side stage. Out came the tarpaulins and bin liners as a result, as protection from the rain was needed.

A further four Meyer UPA-1s were laid on their sides along the front of the stage and the system was powered up. Mic cabling was run in, and with plenty of places to hide cable and stands this was probably the easiest part of the job for the B&H team. Bose 802s and 101s were positioned for foldback and a total of three mixes used to give the performers sufficient coverage to keep together.

By the end of the day the system was running, all the mics and radio mics had been tested, and everyone was ready for the technical rehearsal on Tuesday 19th July. All that was left to do was the burying of the multicore. Fortunately, some local crew buried the

multicore under the turf on the Tuesday - the turf offering significantly better protection than trying to run the cable anywhere else.

The technical rehearsal was the first time all the elements came together, and although wind muffs had been fitted on all the fixed mics, it quickly became obvious that they would be needed on all the radio mics as well.

With adjustments made to mic and foldback positions as necessary, and additional radio mic systems hired in as spares, B&H felt they were ready for the dress rehearsal. The first surprise for the crew when they arrived was the amount of coal that had appeared overnight. It was piled round the monitor and front fill speakers and it covered every cable that was showing under, or on the stage!

However, there were more surprises to follow. BBC Radio wanted a stereo feed. Since the live mix may not have been suitable for broadcast, a separate feed was required and two auxiliaries on the DDA D 32:8:2 desk were pressed into service. This meant that a completely separate mix could be set up, a feed used by both the BBC and the independent three-camera team that came to record the final performance. A few more minor adjustments were made to the system following the dress rehearsal, and all was ready for the first night.

LIGHTING

Chris Clayton, the lighting designer, became involved in the project as early as September 1992. At that time, the scale of the project had been enormous, but because of the subsequent withdrawals of funding, that scope was gradually drawn in to the point where there was very little left for any of the technical people involved to work with. Set designer Simon Beresford, however, had no budget at all, and had to resort to building the set from leftovers. Far from being his undoing, this proved to be his making, and with the aid of a workforce of ex-miners, he produced a most extraordinary set.

Chris fared a little better; he at least had a small budget left to work with. Progress was somewhat hampered by the constant changing nature of the beast: as noted earlier, the production had passed through the hands of three directors and the production team went through five drawings of the stage plan. Chris was forced to redesign the lighting four times.

His work was further complicated by the switch from September to July - the dark of night was a vital backdrop if the lighting effects were to have any impact. As the nights don't start drawing in until after 9.00pm in the summer, the performance had to be back-timed so that the explosion, which causes

giving up when the dawn approached and rendered the programming impossible. Incredibly, the first time they actually saw the lighting and cast together was on the first night.

The wind, which had been ever-present throughout all the pre-production meetings eventually died down, the evening was clear and everybody was just about ready. The performance was lit with a breathtaking array of lighting effects. To maximise what equipment was available clustered Parcans in groups of 10 were stacked on the towers, to create a bank of light, whilst nearer the stage, the Parcans were used in pairs. In total, just under 300 were employed, the bulk of which were run through a 110V supply to increase the level of brightness.

The lighting didn't escape the excesses of the weather either, and the two main lighting towers were covered with protective sheeting, as were the footlight bars. The latter consisted of two Light Curtains (specially designed and manufactured by White Light for the production of 'Chess') hidden in traps under the floor which, during the performance, were raised to reveal a grid. Two of the principals positioned themselves on these grids and a deep red was washed across their bodies. A third Light Curtain was used to pick out the tower of the pit head in a shaft of light.

To light the face of the pit, Chris used industrial strength halogen floods underlighting the main structure, and positioned two Niethammer 1.2k followspots on the towers alongside a lot of 2ks from CCT. The early part of the performance was lit with two 4k HMIs positioned front of house and two 1.2 HMIs kicking in at the side running at daylight temperature. At the point in the performance when the disaster takes place, Chris killed the 4ks to achieve near complete blackout, and within seconds fired six Terrastrosbes across the face of the stage to recreate the explosion. This was the signal for the large cast of children to stream into the arena throwing coal over the miners to simulate the disaster, with the dust created by this adding an eerie dimension to the events on stage.

Further effect was added by the use of two Skywalker smoke machines and a Rosco 1500 smoke machine. The lighting was run from two Celco 60-way desks and an Arri Reflexion.

Lullaby Tunnel played over three nights to an audience in excess of 2,700. As a result of the opera proving the site as a performance area, the demolition of the winding gear scheduled for the week following the performance has been halted and talks are under way to preserve the site as a permanent performance area.

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TAPPING ON ICE

Tony Gottelier overcomes deep scepticism about performances on ice and takes a look at the technicals for Torvill and Dean

Moving seamlessly from a heavy client meeting in Kent, to Heathrow Airport and thence to Wembley Arena on the day of a National rail strike is not exactly my idea of fun at the best of times. But for an Ice Show!

I can tell you that as I sat in my car, late as usual and even later than that, I felt as if I was undergoing some strange metaphysical experience. Could this really be me en route to a dance performance on frozen water? I have always had a healthy respect for treading on thin ice myself. And anyway, why would anybody want to do on ice what they could do perfectly safely on dry land? What's more, in the competitive version whose arcane rulebook seems to be so labyrinthine that even the judges themselves can't, or won't, explain them, what hope for the long-suffering spectator?

But there again this was Torvill and Dean, whose competitive comeback was a conspicuously successful failure at the mercy of the same rulebook during the Lillehammer Winter Olympics. They inspired the nation and gave a whole new meaning to the phrase, 'we was robbed'. This was the ultimate story of success triumphing over disaster, a fairytale in the magic castle mould with just enough pathos to win hearts and minds: the transformation from Ice Prince and Princess to Tearful and Grim and back again. Now the Robin Hood inside all of us was being offered the chance to come out and give it back in pounds and pence for their retirement fund. For this was to be the swansong tour for Jane and Chris.

In fact, they came in droves to what turned out to be the UK's biggest selling tour this year to date. Now they are triumphant in Australia with the USA to follow - so that's put me firmly in my place. This was the last gig in the UK on this leg and the haul to Oz started that night, though they will be back again at the end of the itinerary, so I had better get my skates on.

Arriving late at Wembley Arena was by no means the hassle I expected, indeed the security staff were charm itself, the only problem being that there was no chance of getting up into the 'crows nest' during the first



half of the show which was watched from the wings. T&D's lighting designer Simon Tapping had told me there wouldn't be a problem but it is always disconcerting when your 'inside man' on the board, Nick Moran, has already switched his telephone over to 'gone down-under' mode. Never mind, we hooked up at the interval and I went aloft to witness the spectacle from higher up. Mark Whittaker called the show.

When watching from there one was immediately impressed by the huge white canvas which Tapping had to play with and, indeed, it had been his idea all along to use the rink as a giant projection screen. "I designed the show with two sections of the audience in mind. Those sitting close to the ice who see a great beam show with the help of cracked oil, and those higher up who get the benefit of the projected effects." In fact, the use of projected images of one sort or another took on an early significance with pressure from the producers to use video footage of earlier glories, such as the Sarajevo gold medal, Tapping was wary of this approach for both technical and aesthetic reasons, so he set about conceiving a more subtle alternative making use of gobos.

"I was able to call on the considerable experience gained from the extensive work I've done previously on industrial shows, for example with the earlier BMW launch, and finally persuaded the producers that my ideas

were valid," Tapping told me. In fact, he worked closely with the choreographers, producers and artistes themselves to generate the various looks. Unfortunately, this involved introducing many elements not originally anticipated in the lighting budget which, as a result, would always be under huge pressure from there on. "I was forced to drastically modify my original design to make it fit the financials," Simon bemoaned.

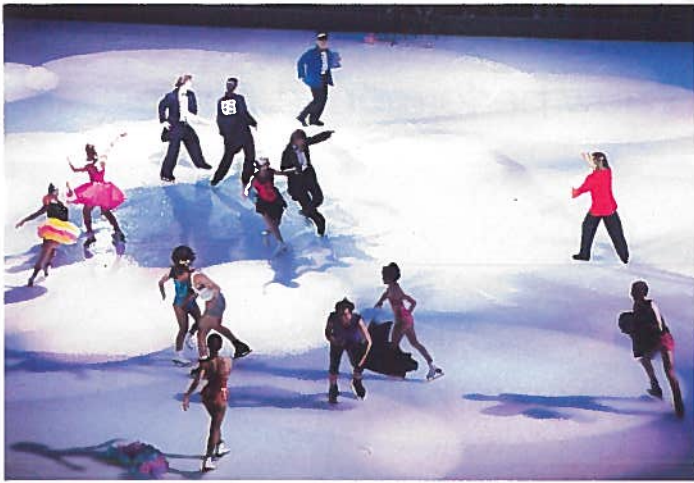
Consequently, in deciding which instruments could best be used for his purpose, Tapping decided to track the development of High End's new Cyberlight, on the grounds of both budget, power and range of effects, particularly with a view to maximising the rotating gobo

and zoom facilities. These would be supported, en masse, by a phalanx of Intellabeams. "Given the funds, of course, I would have liked to use Vari*Lites as well, or as an alternative to the I-beams, after all I have been lucky enough to be able to use them successfully many times in the past," he explained. "But as you have seen, the Cyberlight was exactly the right choice for what I wanted to do and the Intellabeams saved a great deal of money over VL2Cs which would probably have been the alternative."

As I was to see later, the gobo facility was used to the full with numerous custom designs and slides, made especially by DHA, to suit the scene taking place on the ice. In particular, Tapping proposed a spectacular opening scene involving a tube of white silk, surrounded by 12 Intellabeams, which was to drop from the centre of the rig for the opening number.

Onto this were to be projected both monochrome newspaper headlines and photographs of the earlier Olympic achievements accompanied by special music with Bolero undertones. As each image glided away, the culmination would be straight 'sixes', the ultimate score in competitive skating, drifting down the tube in red as the silhouette of the stars, in Ravel pose, would be revealed within the tube. "In order to get Jane and Chris in place we needed a complete blackout," Simon told me. "Wembley were very co-operative: it has to be the first time that the





Emergencies were allowed to be off for a full three minutes!" Intellabeams onto the audience were used as an additional distraction.

In another controversial scene, based on a Beatles medley, Tapping used eight monochrome images of Jane on the ice to simulate the Andy Warhol 'Marilyn' lithograph. "Due to misinformation, and eventually also copyright problems over the music, which was out of our hands, this one didn't quite work out as I had hoped," he said. "But we got over it with the use of the Cyberlight's prism facility and split colour."

Four small square trusses towards the corners of the main rig each carried six Intellabeams surrounding a mirror ball, which was a remnant of an earlier concept in which small circular features would emulate the centre-piece. Lost in budget restrictions, only four kabuki drops remained, but the swirling, disorientating effect which was ultimately revealed certainly achieved the anticipated 'oohs' and 'aahs' from the audience. Mirrorballs certainly seem to be making a big comeback of late (See Pink Floyd feature, L+SI June '94).

So, apart from the C-lights, the main workhorses of the rig were to be 36 Intellabeams, also fitted with custom gobos, and 28 Molefay 8-lights fitted with LSD MoleMag scrollers. The dimmers were Avolites and control was provided by the ubiquitous Wholehog, with a little help from the ColorMag control console.

Another major issue was fast get-ins and load-outs, despite the large size of the rig which had to cover the whole ice-performance area, which meant spans 54m long - the two main ones over the ice formed into a rectangle. To resolve these requirements, and after a round of open tendering, Tapping selected Theatre Projects as his lighting production company, and its associate Brilliant Stages to resolve the technicals for the centre-piece which also had to provide for the descent of a grand piano later in the show. Pete Miles' Spot Co was the supplier, via TP, of the automated luminaires.

Theatre Project's managing director Alan Thomson tackled the logistics issue by roping in local suppliers to support the equipment not supplied from London. For example, in Australia, Jands will be the supplier. Nevertheless, he describes the whole exercise as a 'mammoth task', with up to seven performances per week in a tour which could last as long as two years across three continents. "Although we would, of course, have liked to see some Vari*Lites on the tour, this is just the kind of challenging job that we do really well and I want everyone to be aware of that." The complex rigging system was overseen from London by TP's Jeremy Lloyd and in the USA by Wayne Boehning.

The show itself is a series of set pieces,

starting with the central feature, and Tapping had pre-designed looks to go with all of these. It's a credit to the new luminaires that these all worked out, more or less, successfully. "This meant that when Richard Knight came in to programme the Wholehog, we knew exactly what we were doing and were not left scratching around to find new ideas and solutions. That's not to say that we didn't have problems, but these were largely related to poor information and were overcome with some effort."

As usual, with the best laid plans of mice and men, they ran out of programming time and this particularly impacted itself on the plan to use timecode. "With this kind of show, it is my view that it is particularly important for cues to be made precisely on the beat, and with the best will in the world and the best operator, this will not happen every time on every show," Tapping explained. "Even one second off can destroy an effect."

So he went to elaborate efforts to enable this facility, only to be scuppered by delays in finalising the music by the producers. This was resolved over two or three sleepless nights just before the Sheffield opening, although niggling problems with the Hog's SMPTE continued until an incorrectly oriented diode was later discovered. As ever, Paul Cook was the lighting associate responsible for timecode issues and also assumed responsibility for gobo generation and other technical matters. Tapping particularly likes the idea that now his precise cues for the show are repeated exactly, night after night. "You can really feel that you have designed something in these circumstances," he added.

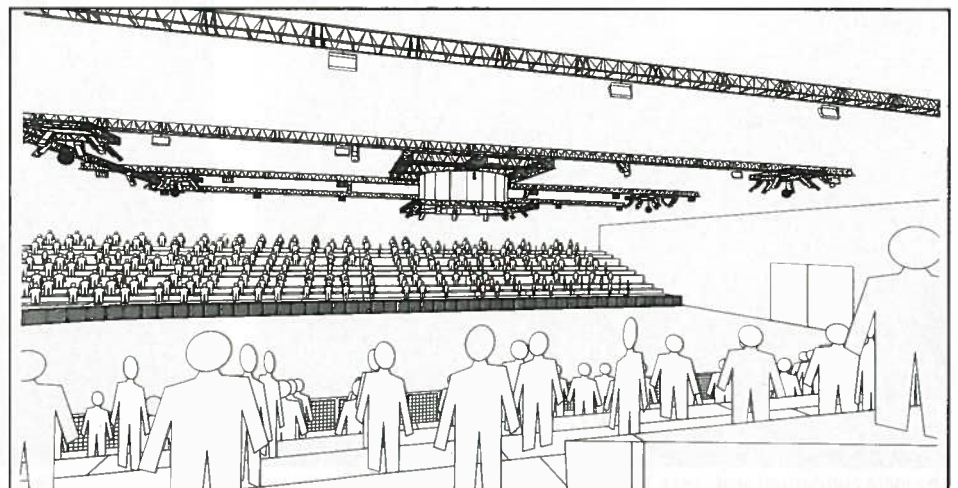
I asked the lighting designer for his opinion of the new Cyberlight. "Bearing in mind that it is a new product and there were some teething problems - there are technical issues yet to be resolved, and accurate information was sometimes hard to come by, which caused us

some headaches though we got over them - I must say that I was absolutely delighted. It was a stiff test if you think about it, we were using every single facility. Every gobo and slide slot was used bar one, we even used the gobo shake facility, indexing, rotating, zoom and so on. Once we got it right, they never let us down. It was the right choice and Cyberlight delivered precisely what I needed for a show of this kind." While Tapping doesn't wish to be seen as a crusader for a particular luminaire, he is keen that other designers realise that there are other lights out there and that they should check them out, rather than taking the ostrich view.

Sound in the UK was in the hands of Canegreen and consisted of a Meyer and Crest combination. The centrepiece truss was adorned on each corner with clusters of six Meyer MSL3s to provide a central 'single source' system which gave horizontal coverage of approximately 105 degrees. Vertical dispersion was enhanced using an additional four Meyer VPA boxes slung under each cluster.

The new Meyer MSL2 speakers were used as in-fills and 650 R2 sub-woofers were strapped to the top of the truss. "This meant that the entire system was totally flown," Canegreen's Jan Stile told me. "With cables from hell running across various trusses back to rackland." There to join up with the Meyer controllers and Crest power amps. The control end of the system belongs to the performers and consists of various ADAT tape players and CD units run through a small Soundcraft console with the whole system mixed in stereo image.

Jan Stile again: "The system is capable of very high SPL, much higher than one would generally require on a show like this. However, the ability to flex the muscles of the system even just a couple of times during the show, makes it all worthwhile." And there wasn't a single microphone!



NORTH WALES THEATRE

Ruth Rossington on Llandudno's new performance venue

Already a dramatic feature on the promenade of Llandudno, the handsome lines of the new North Wales Theatre can now be discerned clearly. An unusual building, constructed of a complex steel frame with blockwork cladding under a tiled mansard roof, it will be a key feature of the arts provision in the area. One of its most stunning assets is the extensive glass cladding and the two glass towers, which stand sentry-like at either end of the complex.

The project, which cost a total of £4.5million, has been completed in a very short space of time by main contractors Mowlem, under the guidance of theatre consultant Keith McLaren of Carr and Angier. The lighting, sound and communications systems were installed and supplied by Northern Light who, although based in Edinburgh and Glasgow, frequently carry out contracts south of the border. This, however, is only their second major contract in Wales, the first being the New Theatre, Cardiff, where, coincidentally, they are currently carrying out further upgrading work.

As the theatre is intended to host a broad range of performance styles, the stage is one of the largest in the UK, and can accommodate even the most complex productions. The working depth of the main stage is 13.7m with 58 counterweight line sets for flying scenery and lighting from a 20m high grid. Thanks to a full flying facility, high-tech scene changes can be employed, whilst the width and the height of the proscenium will show ballet, dance and opera to best effect. The concept of maximum flexibility has led to the inclusion of a flat-floored auditorium with automated retractable seating, four simultaneous translation booths, microphone points throughout the hall, and enhanced lighting and sound systems. As a result, the venue will be capable of handling all the current repertoire of the Welsh National Opera.

The mechanical and electrical systems have been developed to minimise energy consumption and be responsive to the variable environmental conditions. Provision has also been made for the possible retro-fitting of an electro-acoustics system, thus allowing the electronic 'tuning' of the auditorium for variable resonance. With this facility it will be possible to choose the exact reverberation time appropriate to the type of performance. During the design development, 3D modelling was used not only to analyse the acoustic performance of the auditorium, but also to



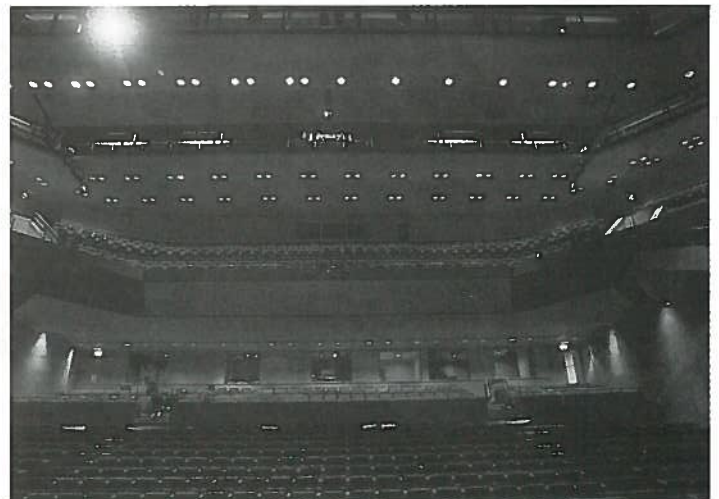
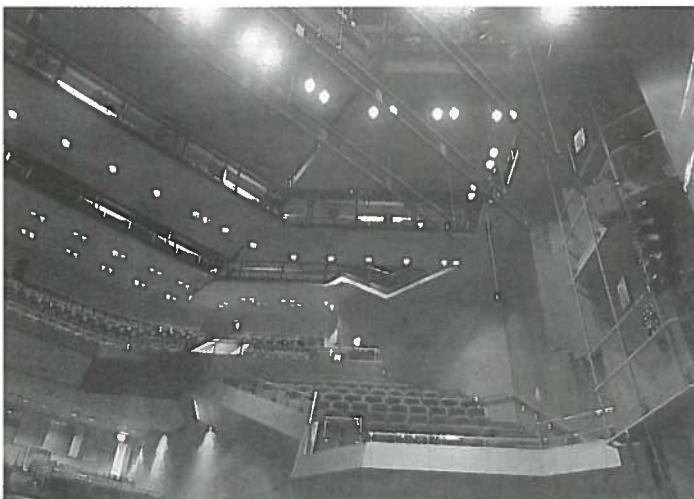
The latest addition to the Llandudno skyline is the modern facade of the North Wales Theatre.

investigate the sightlines from each seat.

With a venue of this calibre, the sound provision was obviously going to be critical, and it was important that allowance was made from the start, for a complex range of demands to be placed upon it. The fact that this was to be the new home of Welsh National Opera, was enough to put the fear of God into anybody. So, an expert was drafted in, and the production sound system was designed by Peter Mapp for Carr & Angier. The mainstay is a 32-channel Allen & Heath Saber, routed into eight groups and eight matrix outputs, which can be positioned either in the control room at the rear of the tiered stalls, or at a remote position in the auditorium itself. The desk has been customised to meet the specification and has been fitted with multicore connectors on its inputs and outputs. An effects rack is inserted in the signal path between the desk and the rack, and, as well as being fitted with Tascam CD and cassette machines, Yamaha SPX990 effects units and BSS graphic equalisers, it also features individual sockets for the connection of an alternative sound mixing desk.

All the main PA signal processing and amplification equipment is in two racks in the plant room. A stereo reproduction system has been installed either side of the proscenium arch, complete with sub bass. There is a mono central cluster with a delay cluster for the rear balcony, and under balcony ceiling loudspeakers for the rear stalls. The stereo system relies on eight Martin EM75 full range cabinets and two Community CSX sub bass cabinets, whilst the mono cluster is largely run through three Community RS220s and two Community RS JR full range cabinets. No stone has been left unturned, and a further four Community RS220s are used for delay in the balcony, and nine JBL Control 1 ceiling mounted cabinets play their part in the rear stalls.

The processing side is a real mixed bag with BSS digital delays and graphic equalisers, an Oxmoor switching matrix, dedicated Martin and Community loudspeaker processors, HDL attenuators, and Ashly FTX2000 power amplifiers pulling together. Control room monitoring is achieved using Yamaha NS10M full range nearfield monitors, which are



The main auditorium seats over 1500, a third of which is retractable to create a large exhibition floor. It also boasts one of the largest stages in the UK.

powered by an Alesis stereo reference amplifier. The monitor signal is routed via Biamp digital delay units, to time align the monitored audio signal with that of the reproduced auditorium sound. Community wedge monitors and full range effects cabinets have been provided for foldback and effect use. These have been fitted with integral Ashly power amplifiers. There are 148 microphone lines installed at the theatre, together with 32 effects loudspeaker tie lines for distributing signal at line level around the building.

The system was designed to achieve 100dB, plus 10dB headroom, and has slightly exceeded this. The hum generated by the system was to be no more than 20dB when in use and needed some adjustment. After a few additional bits of metalwork were added to the equipment racks to screen the attenuators and loudspeaker processors, this was achieved, thanks largely to David Rees and his new custom-designed air-space hum absorber.

A full paging system has also been provided, which covers all backstage and technical areas, and is also routed into the foyers via the voice alarm system. Paging points around the venue and mobile points on both the stage manager's desk and rehearsal/production desk have access to 10 loudspeaker zones. Background music is provided to the foyer zone, and of course, show relay is provided, both in clean feed form for the various sound, lighting, followspot and simultaneous translation rooms, but also as part of the backstage paging service. A twin ring intercom provides immediate communication between technical staff, with 36 circuits of cue lighting also available for use.

The electronic equipment used in the systems was manufactured by HR Electronics, Tecpro,

Biamp, and Northern Light. A large part of the equipment was also manufactured 'in-house' including both the stage manager's desk and rehearsal desk.

A full video and CATV system has also been provided as part of the contract. This can provide two internal channels of TV, in addition to the four off-air channels, distributed around the whole building. Video tie lines are in place, allowing television receivers, cameras, or video monitors to be positioned wherever needed.

The house lighting system is handled by a Strand Accent, which runs 24 channels of Strand LD90 dimmers. Control stations are available in both lighting control and on stage, with protected on/off switches at various entrance doors for the cleaners to operate as required, and a portable plug-in control station has also been worked into the equation. There are 19 circuits of non-dimmed lighting, with each circuit being individually RCD protected, and rated at 10 amps: these are controlled from a portable plug-in control unit which operates a Northern Light manufactured relay cabinet. The company have also installed a full PLC-controlled working light system which controls all white 'workers' and blue 'performance' lighting around the stage, orchestra pit, galleries and front of house bridges.

The lighting control system is a Strand Mini Light Palette with 240 ways of LD90 dimmers - the second to be installed by Northern Light this Spring, the first being in the Anvil Theatre, Basingstoke (see feature, L+S, June 1994). A unique feature of the system is that all 72 dimmers for the front of house circuits are routed via a patch panel on the fly floor, where the front of house circuits terminate for

patching. This allows an incoming touring company to patch the front of house circuits into their own dimmer system with ease. The design of the distribution system is such that there is a socket outlet in every position that you could possibly need.

For the main lighting, a limited quantity of equipment was supplied, including Alto and Cantata profile spots, Prelude fresnels, cyc floods and, of course, the obligatory Parcans. CWS Engineering installed all of the specialist cabling.

For Northern Light and the rest of the contracting team it was a major achievement given the time-span. As with all new theatres, the final commissioning was shoe-horned into an exceedingly short period and the project was running six weeks late when the company first went to site. Under the guidance of project engineer Larry McGuire, they managed to claw back that time during fit-up, even though it meant that the small control room sometimes overflowed with people trying to do different things simultaneously. Despite the pressures of time, or more accurately lack of it, the deadline date was met and the theatre opened according to schedule.

The official opening came in early July in the presence of the Prince of Wales, when the BBC National Orchestra of Wales, together with the Liverpool Philharmonic Choir, performed a spectacular version of Beethoven's Choral Symphony.

As North Wales' new arena for Welsh National Opera, the theatre will be at the heart of the Llandudno October Festival, indeed at the heart of Welsh Arts, full stop. Productions already booked for this summer include the London City Ballet followed by the smash hit 'Buddy'.

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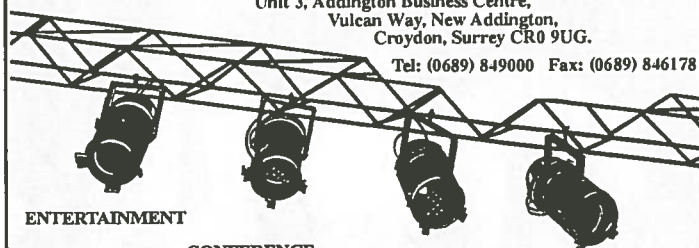
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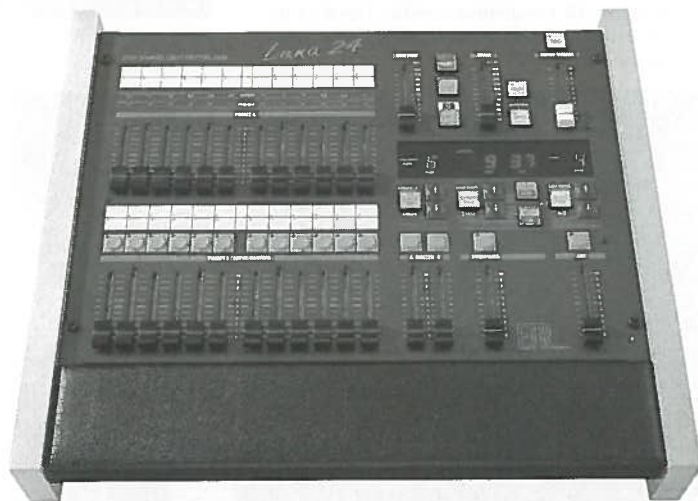
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SINGAPORE SWING

Ruth Rossington seeks out new product at Pro Audio & Light Asia

There's a misconception perpetuated by those who've never been further than their own back yard, that those fortunate enough to spend a good part of the year travelling around the world are skimming through life on some sort of first-class ticket. Now I'm not stupid enough to contend that seeing the world at someone else's expense doesn't hold any charms, but for the travelling circus, there's always a major pay-off on their return. If I had a pound for every time somebody's said to me "it's all right for some" I'd be the biggest catch this side of the pond. As it is, I have a laundry bill to match my overdraft, a neighbour that thinks my comings and goings in the middle of the night translate into practices less than savoury, and a pile of paperwork that just gets shifted from one corner of the desk to another. High time, I think, to set the record straight. It's bloody hard work, and don't let anybody convince you otherwise.

Having said that, there are certain destinations that can be worth the hassle, and Singapore is just such a place. The grind of everyday office life rapidly fades in the warm night air, as the smell of chilli crab drifts in on the breeze, another Tiger Beer hits the spot, and the hum of excited chatter fills the waterside bars and cafes, boats bobbing in the harbour (get on with it, Ed).

OK, it's not all Singapore Slings at Raffles, but it can be pretty good. I love the place despite, or perhaps because of, some of its more authoritarian initiatives. This is the country where a benevolent big brother has found his home; where taxi drivers have a system in their cars which monitors their speeding, and pings



The traditional dragon dance parade that launches each Pro Audio & Light Asia.

irritatingly every 10 seconds if the driver ignores the rules; where there is a code of conduct so far-reaching (no jay-walking, no litter dropping, no forgetting to flush the toilet etc) that chewing gum is being offered behind closed doors as an illegal substance. Imagine a benign dictatorship in America or Europe getting anywhere close to this kind of legislation for the public good.

As a result though, the island is immaculately clean, cars are confined to car parks and the streets feel safe at nights. Talking of cars, there is one fact I gleaned during my visit that I cannot resist passing on. A basic car will set you back \$100,000 Singapore dollars - that's roughly £50,000 - and to add insult to injury you need to buy a license to run the thing, which can take several years to come by and which will set you back a further £30,000. What's more it's renewable in four years time!

So, as you can imagine, Singaporeans are a people who take nothing for granted, and who possess a rare determination to work hard for everything. The rest of the world had better keep a watching brief on the Far East, because pretty soon, it will be a major player in the industry in its own right. Don't say you haven't been warned.

Their will to succeed shows. In just over three years Pro Audio & Light Asia has grown to be a much more business-oriented show and is now pulling in, in some quantity, serious buyers and end-users.

There are still teething problems that the organisers need to resolve if the show is to keep its exhibitors, not least that the air-conditioning,

which is much needed in Singapore, should be on during the first day of set-up and during break-down. The fact that it wasn't demonstrates a certain bravado on the part of the organisers who were soon made to see the error of their ways by angry exhibitors who insisted on its return.

Because Pro Audio comes hot on the heels of Frankfurt and Rimini, many of the products being aired in the Far East have already already been featured in the pages of L+S, but here is just a taster of what the show had to offer.

Apogee had the new AE8 and AE9 loudspeaker systems on stand, alongside the AE15 and XP14 concert sub-woofers. The AE8 is a bi-amp, two-way with 15" bass cone driver and 2" high frequency driver, whilst the AE9 is bi-amp three-way with 15" vented bass cone driver, 10" sealed mid range cone driver and 1" fluid cooled tweeter.



Support for UK companies: Freddy Lloyd of the PLASA Executive Committee (right) with Mike Bell of the British DTI.



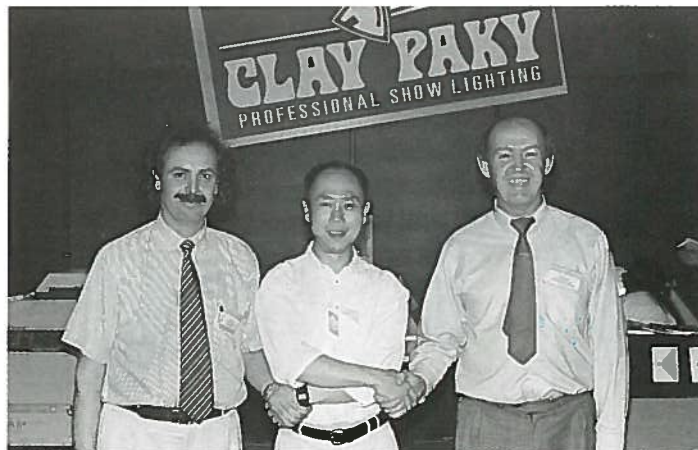
Paul and Keith Airey going live in Celestion's sound booth.



Part of the war zone of the 'noisy hall' which rapidly earned the nickname 'Vietnam'.



The massive structure of the LSD Total Fabrication stand, which also featured Zero 88 lighting control equipment, marked the entrance to the quiet hall.



Pio Nahum of Clay Paky (left) and Pulsar's Ken Sewell (right) shake on the deal with Bingo Tso of ACE, newly appointed distributor for China. The first official joint project will be at the Shanghai exhibition this month.



Jeremy Collins, Graham Eales and Simon Garrett of Selecon with the new Accent range of luminaires.



Bob Doyle of Midas, David Bisset-Powell of Martin Audio and David Webster of Klark Teknik enjoying the sun at the Martin/Highway stage show.

Australian company ARX's design engineers have developed a new range of amplifiers - the SX Series. All are 2u high with power outputs ranging from 150W RMS per channel/8 ohms to 1000W per channel/4 ohms. All are fan-cooled with full protection systems and new 'extreme duty' power supplies.

Celco and Electrosonic were in tandem as ever; the former showing off the Aviator, now in full production, and the latter the new ImageMag videowall controller.

Last year Celestion opted for a mini-cinema on stand which proved something of a haven during the show. This year they changed tempo, went one better, and ushered into their soundproof room a live act, the Airey brothers, and ooh yes, one of them had really played with Paul McCartney. Whilst at the Hard Rock Café we were privy to more of their playing, the luckless duo having been dragged onto stage for the umpteenth time that week to give yet another impromptu performance. During the day, the boys were doing their stuff at the show, and so effective were they that Celestion were faxing orders off the PLASA stand.

Whereas at Rimini, Clay Paky & Pulsar dispensed with the lightshow, at Singapore it was back in its full glory with the Superscan Zoom now on the third leg of its world tour. They also announced that they have jointly appointed Advanced Communication Equipment as their exclusive distributor for

China. ACE are based in Hong Kong and have regional sales offices in Beijing, Guangzhou, Shanghai and Shenzhen, together with a network of resellers across China. For Clay Paky & Pulsar it marks a further CP&P flag pinned to lighting and sound world map.

Community, for their part, had a product so new it wasn't even on stand. To be launched soon, the new VHF2100 driver represents the first of several refinements scheduled to appear in the company's RS Series of electronically-controlled products. The new VHF100 is a proprietary high frequency unit designed to optimise overall performance in three-way systems. Slated to be installed in every RS880 this year, the VHF100 will shortly be added to the RS660 and RS220 loudspeaker systems as well. Ray Bond of Australian company Dynalite was on the Te Deum (an unfortunate name if said too quickly) stand, and directed me to look at the TOC range. The latter are probably the biggest manufacturers of co-axial speakers in the US, if not the world, but are not particularly well-known in the UK. TOC have recently introduced the FT1, an ultra compact trapezoidal co-axial system.

FAL were to be found on the Novalite stand, and where there's FAL, there's usually Paul Dodd. Sure enough, the man himself was taking people through the qualities of the new Proscan which offers seven colours, plus white, two colour temperature correction filters, nine

fixed gobos which rotate in either direction, with a second gobo wheel that takes five, frost, oh blimey, you name it, it's got it - it even allows the address settings to be set by LED numeric display - good news for all those fed up with fiddling with those annoying dip switches. Also on show was the first production model of the Babyscan, with seven colours and seven gobos, whilst the Gyro, the prototype of which was seen in Rimini, is now in full production.

High End Systems had the new version of the Cyberlight - the CX - a trimmed version of the former with some of the toys removed. It has a high intensity light source, and now has preset control as opposed to remote. According to John Adams, the CX is coming in at a price that will make the touring and nightclub markets take note. Also on stand was the new LCD controller, the Cyberlight version of the Intellabeam controller, which commands up to eight Cyberlight fixtures. It includes programmable macros, LCD display, operating system and programme memory card back-up, plus the familiar Lightwave Research control architecture. More revelations are promised at PLASA.

Jands have upgraded the software for their Event consoles. Version two means that memories can now be built from other memories and any subsequent changes in the base memories are automatically reflected in the built memory, a feature which should allow moving lights to be programmed more easily.



Ian Fielding (right) of Soundfield talking single point source microphone systems.



Community's vice president John Wiggins (left) and sales director, Douglas Wilkens.



Paul Mulholland (centre) of Jands promoting Version 2 software for their Event console.



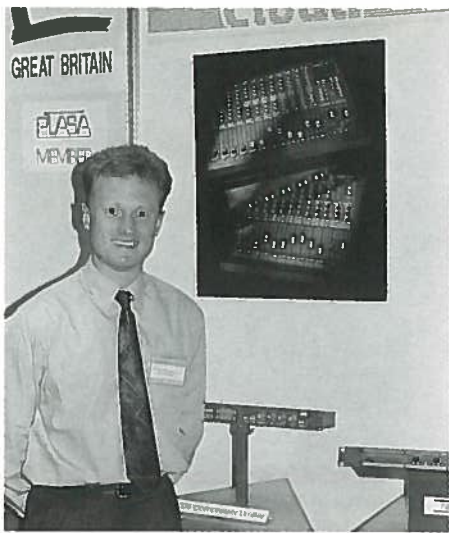
RCF's Fausto Incerti and Antonio Ferrari with distributor Christopher Chang of TEC Revox.



Cyberlights in action on the stand of High End.



FAL's Omar Bertani (left) with Paul Dodd and a full complement of lighting effects behind.



Now more active in sales, Christopher Woodruff of Cloud with the CX122 mixer zoner.

Function keys can be programmed to run a number of button presses, dimmer channels can be set to always output a minimum background level, dipless crossfades are now possible between any memory master, as are crossfades on chase steps, improved chase controls, cue linking and improved timing options.

JBL have a new contracting version of the Control 1; just add a 'C' to the name and you get a non-magnetically shielded unit, without the cosmetic trim, which is aimed at the installation market. Hard Rock Café in Beijing recently acquired 200 of its stablemate, the Control 1.

Jem were supporting Far East distributor Hawko, and had on stand a posse of their machines. The block and electrics of the ZR20 have now also been fitted to the Fogger making it a much more powerful piece of kit. And, of course, HOT Technology cropped up, but as the real thing will be on show at PLASA, we'll pick up the trail then. One interesting fact that did emerge from conversations with new addition to the Jem team, Bob Wells, was the strange places Heavy Fogs are finding themselves in. The latest craze is their use at weddings where they are being inserted in ducts along the aisles so that the bride and groom can float down it on a 'cloud'!

Caterpillars were in evidence again on the



Rick Wilson of Le Maitre (centre) with William Nyng and Chung Sooleng of Pyro Splendour, signed up at the show as sole distributors in Malaysia.



Soundscape's Nick Owen (right) shows their recording system to Shaun Kerrigan of Soundcorp.



Alan Graham of LSC on tour with the company's dimmer and hot patching system.

stand of **Lighting Technology**. Following their launch at LDI, the first batch have now wiggled their way to showrooms in 12 different countries, and the company have been forced to step up production to keep pace with demand. Watch out for new additions to the family at PLASA.

LSC launched a dimmer and hot patching system aimed at the touring market. It features 36 channels of LSC tour series dimmers, sophisticated digital instrumentation and a versatile hot patch system housed in a compact road case. Alan Graham was busily selling products off the stand, as indeed were many at the show including **Le Maitre**, who sold their whole stand, **LSD**, who sold the stand twice over, and **Avolites**, who sold their Diamond desk off the stand to Engineering Impact, who I understand have bought quite a bit of kit from Avolites in recent months, for use in the Keelung Cultural Centre. One of the interesting things about the Singapore Show is that visitors do come ready to buy; usually they want to pay cash and strangely, they always prefer to deal in American dollars.

Talking of LSD, total show control was the by-word here. With the addition of DMX, the Icon desk can now control a range of guest fixtures, and as a result has been elevated from a dedicated desk to a universal desk. Most



JBL team of Daniel Tresemer, Guy Hawley, Doug Daniel, Michael Reeves and Mark Terry.



Ian Coles of LSD Inc with UK counterparts Chris Cronin and Peter Johns.



Jon Petts and Bob Wells of Jem with the Heavy Fog, now added to the guestlist at weddings.

recently, it was used on the Grateful Dead to control Clay Paky Superscans. Getting your hands on the updated version shouldn't be a problem. If you have access to a modem, dial up LSD, choose what you want and transfer it to the desk.

Martin Audio recently put the finishing touches to a contract to supply a huge F2 System, one of the largest rental systems ever purchased in the Far East, to Highway Sound Light of Singapore. During the show, the two companies held a joint press launch and then promptly dragged everybody outside for some good tucker and a demonstration of the system's talents al fresco. I could do with more journalistic research of this nature. As far as I'm aware the F2 is the only reconfigurable system in the world.

Italian manufacturers **RCF** had a full range of products including the new AM2020 mixer amp and a new member of the Monitor Series, the MSW 8 sub bass unit. Previewing prior to its full launch at PLASA was part of the Event series. More of which in the PLASA review.

The **Selecon** Acclaim range of 500/650W luminaires feature three types of profiles with six different models. The condenser profiles favoured in Europe provide a flat light field for precise gobo projection and shaping of the beam. Selecon's in-house optical development



Steve Warren of Avolites (centre) with Nicholas Fok and Hsieh Yin Lung of Engineering Impact, with the Diamond II destined for Keelung Cultural Centre.



David (left) and Colin Park of ARX with the new Mixx Master system and the SX series of amps.



Henry Goodman (left) and Mick Brophy of Amek, with the Recall by Langley, with new features that should make it of interest to the theatre market.



Ray Bloom of Rane (left) with Ewan Atkinson of Shuttlesound and ShuttleCAD.

software has resulted in some very large increases in light output. For instance, the compact fixed beam profiles offer excellent light output providing a real alternative to variable beam profiles for venues with common throw distances and display lighting. In addition, the Acclaim Zoomspot wide provides over 1200 lux at an 8m throw in spot focus. The company have just completed a museum installation in Kuala Lumpur, and in the week prior to the show installed a large number of Rainbow scrollers into Shanghai TV - their biggest sale into Asia.

Soundfield showed the new MkV single point source microphone which offers 20dB increase in dynamic range and can accept peak signal levels of 145dB SPL whilst still maintaining accurate polar patterns, over the previously available Mark IV.

Soundscape were showing their multi-track hard disk recording system. Running under Windows, it has extensive audio editing facilities. Software includes eight track playback from disk, eight real-time parametric EQs and is expandable in modules of eight tracks up to 128 physical tracks. Soundscape are hoping that the system will be taken on board by the nightclub industry.

British audio mixing console manufacturer **Soundtracs** used the show as a base for promoting both new and well-established consoles. The new Sequel II rubbed shoulders with the Solo consoles, whilst from the recording range, Soundtracs featured Jade, the VCA automated Solo Logic and the recently launched Topaz 8-buss project studio console.

VW Marketing were representing **Cameron** who introduced a low-cost multi-effect videowall controller. The new system, which retains several of the effects of the MEVV, will be expandable from a basic 2x2 to 8x8 videowall, using either 64 monitors or



Bob Golienski, Richard Frankson, Gisella Burg and Dave King with a section of Allen & Heath's GL4 - more of which at PLASA.



Nick McGeachin of Numark with DJ providing on stand entertainment.

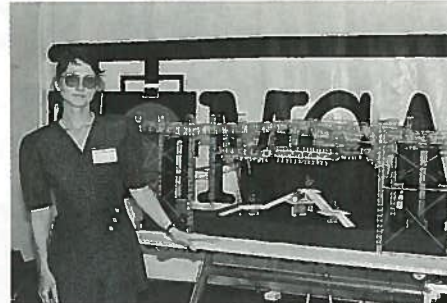
projection cubes. As with the MEVV processor, all the digital videowall effects are incorporated into a single control rack.

With Force 1 and 2, **Wharfedale** are doing what they do best: producing a loudspeaker which looks good and sounds good. The sound quality was so good in fact that I thought it was coming from the larger speaker below. The new Force 1 contains a high-power 100mm full-range drive unit, electronically equalised. Where the Force 2 differs is in its ABR (auxiliary bass radiator) enhanced bass performance. Where a higher SPL or more bass is required, the Force PSB is a bandpass tuned double cavity enclosure containing two 170mm long-throw bass units fitted with high temperature voice coils capable of handling a full 80 watts RMS per channel. The unit also has a full crossover network with stereo connection for two mid-high enclosures. Also on stand was the latest version of the Force 2180 which is apparently doing rather well in China for KTV applications.

Wembley Loudspeaker report the installation of the 3D Storm system, plus a number of



The team at Source One (left) celebrated their first year in business with a special reception for dealers and special guests. As is traditional, the karaoke machine was wheeled out and reluctant stars coaxed on stage. However, no such reservations were displayed by Dick 'Carraoke' Carrier of Lightfactor and Ivano Burato of Coemar who had to be eventually dragged kicking and screaming from the stage.



Michelle Voiles of Tomcat with a scaled-down version of their staging and support systems.



Tommy Stephenson and Colin Waters of TMB flank Eric Robinson of Jands.

Spyders and subs, into laser company ACR's German showroom. The company have also been asked by Vitavox to handle repairs on their behalf, enabling them to concentrate on new products.

If you're still not convinced about Pro Audio & Light Asia, I counted over 250 exhibitors, and the official figures claim a visitor attendance of 6,000. PLASA's UK exhibitor group was over-subscribed and at 32 companies, the largest group the association has ever sponsored. To give you some idea of the level of opportunities available, let me tell you that during the course of the show a note from the British High Commission was handed to all UK exhibitors outlining the Pontiac Marina Project (worth \$1.65m dollars) which is sourcing sound equipment and British firms were urged to make contact with the High Commission.

If you're not yet one of the initiated, then you should be. Some people have got Asia like they've got religion, and whilst I don't recommend going that far, it's not a bad idea to consider becoming one of the ever-growing number of converts.



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THE WORLD OF SHAKESPEARE

Brian Larcher discusses the technical staging behind an audio-visual pageant

Back in the dim technological past of 1976, a forward-thinking and innovative USA-based production company, White Oak, was commissioned to create a dramatic visitor attraction at the new Waterside Studio Theatre in Stratford-upon-Avon. The audio-visual show, named *The World of Shakespeare*, which portrays Elizabethan England and is viewed by a standing audience from the central auditorium chamber, was the first AV show of its type in the country and continues, daily, to entertain tourists and visitors to Stratford.

Peter Bainbridge, owner of *The World of Shakespeare*, had long believed that with the right technical expertise the existing auditorium could be transformed to accommodate live entertainment, whilst retaining the existing AV facility. In December 1993, following much consultation and research, he determined to bring together a team of specialists to initiate the project. A significant investment followed in seating, sound, lighting, controls and the creation of an independent theatre company to breathe life into the new space. To complete the scene, in the spirit of true innovation, artistic director Robert Clare was commissioned to create a new and unique 30 minute adaptation of *Macbeth* as the opening production.

Harkness Screens & Hall Stage Lighting provided a half tonne motorised eight-line pile-wind hoist to raise and lower two internally wired lighting bars to travel seven metres. The bars, with lighting, had to store as close to the ceiling as possible so as not to intrude into view during AV performances. They had to be capable of being lowered, by remote control, to a suitable, pre-set operating height and also able, when required, to lower still further to enable access from the floor for maintenance. A secure position within the roof void of less than one metre headroom was needed to mount the hoist. The ceiling deck was not structurally suitable, and the solution



The World of Shakespeare opens with the illumination of Elizabeth 1's portrait and the royal court of arms. Surrounding this is a huge map of England, with compass roses and bearing lines superimposed. It appears to vanish as back-lighting reveals figures from Elizabethan society including Sir Walter Raleigh and Sir Francis Drake.

was provided by clipping together three triangular aluminium trusses manufactured by Penn Fabrication with special adapter plates by HS&HSL to secure to two roof beams four metres apart.

Accessing the hoist into the roof space proved a problem as there was no direct light and it had to go via the underslung gondola in the auditorium centre bearing AV lighting. After raising the hoist to the side of the gondola it was tipped sideways on to the deck and then raised to its mounting position. Lines from the hoist were installed to travel in both directions down the centre line of the octagonal auditorium to two block diverters, before reaching the suspension pulleys spaced above the lighting bars. Each bar was wired with 36 circuits and the twin multicore feeds to the bar follow the travel of each bar, automatically retracting, using a simple line clamp and pulley-weight system. There was no space available for the more normal methods of dealing with the

multicore loop and most importantly, it had to be taken out of the sightlines for the AV shows.

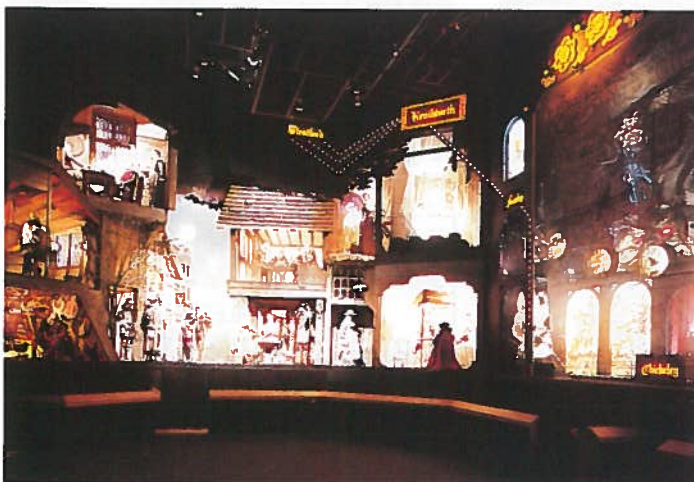
In addition to building the cranked lighting bars R&G lighting also produced a static grid. This was a rectangular internally wired lighting frame hung from the central gondola, wired with a further 36 circuits. The lighting system was designed by Greg Moger who also supervised the work of installing 72 additional lighting circuits into the roof, building a mains distribution panel with eight dimmer packs and cord patching behind one of the AV displays. The dimmer packs were R&G's own Aurora 6 x 2.5kW with twin socket outlets, two packs each feeding on separate phases the raise and lower bars and the central grid.

A remote control line was run to the control position on a cleverly designed bridge deck, conceived by Theatre Futures, over the main entrance stairs to the space. This housed the Arri Mirage 75 48-way desk and

monitor and also the sound mixing desk.

Local electrical contractors were employed to run a 100 amp three phase supply into the auditorium from the building intake room. Not being theatre people, the lack of haste in progressing this work almost proved to be a major calamity. It was Thursday evening before power was connected to prove the hoist and enable the rigging of lighting for a Friday rehearsal. The mains supply also fed adjacent shops so when it had to be switched off on two occasions there were many parties interested in its speedy return! Although lighting was specified and costed for the event, additional production lighting was hired for the season. There was a consequential failure of some lamps from time to time and the blowing of fuses in the early period after installation, before things settled down.

One of the greatest challenges in the theatre installation process was the integration of a flexible and up-to-date audio system, suitable



An ever-changing panorama of the sights and sounds of Elizabethan times.



The auditorium transformed into the in-the-round performance space.



Artistic director Robert Clare was commissioned to create a new and unique 30 minute adaptation of Macbeth as the opening production.

for live and pre-recorded theatre sound, together with the existing AV show, and specialist audio systems were needed to deliver the dramatic effects required. The basic design consists of two stereo pairs on opposite walls, with a speaker in the centre of each of the other two walls. In addition, a central speaker in the roof provides a useful seventh channel (great for pulling the sound in from the walls). As the theatre acoustics are very dry, with a remarkably high ceiling, a controlled sound picture can be generated. In the near future base bins will be added below the floor to further enhance the surround experience.

Prior to the new installation, the audio had been played back on one of two half inch Otari 8-track machines. Incredibly, they have coped with over 100,000 performances, with lost shows being counted on one hand. They are now beginning to show their age and will be replaced by digital 8-tracks machines in the Autumn.

Over the years the AV system has become somewhat customised, with occasional, unexpected results. This was due in part to the requirement for simple, one person operation and to the idiosyncrasies which creep in to many shows over a run of this duration.

The tape machines rewind automatically when they find clear leader, back to previous clear leader, then play until they find time code, at which point they stop, queued up for the next show. The wiring had also been amended in a rather 'interesting' fashion, making it difficult to mix in the desk signals reliably!

Being an intimate theatre, the noise of the tape machines meant they had to be kept in a separate room, operated by remote control. The customised control system on the Otaris caused a problem as two remote systems were needed, one for the AV and one for the theatre show. Eventually we wired a complex switch (it took two days to construct), which re-routed the audio and control signals for the two shows, allowing one switch to control the entire process.

The resulting system is now highly flexible, and the dramatic sound has to be heard to be believed. The first production, *Macbeth*, provided a perfect opportunity to use this to great effect, with the black and midnight hags flying around the audience from all directions.

Due to the age of the Otaris, however, we resorted to running from stereo for some performances, with the movement controlled live through virtuoso mixing on the 16-8 (-2) desk. This will become unnecessary with the installation of the new machines, but interestingly, careful routing of the stereo signals comes remarkably close, at times, to full 3D sound.

Theatre, and those involved in electro-acoustics music, may wish to consider their



options in this respect. 3D audio not only helps the sounds to come alive, as the less sophisticated surround sound increasingly used in cinemas demonstrates, but has the effect of involving the audience in the audio environment. In many ways this is more effective in a small theatre (especially set in-the-round), than in a cinema-type auditorium, which is still based on a fixed stage format. Instead, here, we have the audience inside the theatrical and audio set.

The mixing of the show, using studios designed for stereo output, was a complex and less than ideal process. It caused Tony Aldridge of Aldridge Technology to write an audio mix application for his Atari Falcon, allowing him to specify ideal positions for sounds in time and space, similar to graphic computer animation techniques. It also allows the specification of speaker position and room acoustics, enabling the computer to do the actual mix for the specific space. This unique facility will be developed further and put into full action for the 1994 Autumn season at the Waterside and will provide one of the most complete three dimensional audio systems in any theatre in the country.

The floor of the auditorium area used for AV audiences was originally carpet stuck to screed. Within the shortened week allotted for the transformation of the space, the carpet had to be stripped out and an MDF skin laid to provide not only a new stage surface for the actors but also a base for the new surround seating. With a scaffold tower in the room for the high level work in a space 13m x 8m it was inevitable that work requirements would clash. Fortunately, no major problems occurred.

Even when a party of some 60 French

children turned up on the doorstep expecting to see *The World of Shakespeare Experience*, the workforce on site carved out a quick tidy, hastily adjourned for a tea break and 30 minutes later greeted happy faces emerging from the room. It was decided we would not disappoint them as they had travelled a long way and unfortunately had not received the letter informing them that the centre would be closed that week. A little PR was called for and was helpfully provided, all within a very tight work programme.

The entire floor was given its initial two coats of paint overnight by the client himself, with assistance from two colleagues, so that it was dry for the next day when the seating units were to arrive. Modifications also had to be carried out on the two handrail barriers around the perimeter of the auditorium to accommodate the seating and redefine the gangways and exits.

Christopher Richardson of Theatre Futures redesigned his 'Mirage' upholstered auditorium seating to provide room for 115 seats in two rows around the perimeter of the space. The outer row is elevated 340mm. Manufacture of the tubular steelwork and complicated joinery shapes was executed by P.L Parsons under the personal supervision of Philip Parsons. Theatre Futures also faced further problems with the concept of the AV Auditorium having a dual use in accepting live performances, since the space was in-the-round and allowed a seated audience to see the *World of Shakespeare* displays above the heads of the opposite audience.

The solution was to provide a brilliant and ingeniously conceived structure hinged at the rear, to cover each seating module when closed which, when swung open to the vertical position, provides a masking screen behind the audience, thus adding to the intimate nature of the theatre space. The frames of the covers are an extension to the tubular steelwork and have a fabric infill, the weight and balance of the frames being taken by two small gas struts to each unit. The result is seating which is both comfortable and attractive, blending well with the revised concept of the space.

To complete the transformation of the space a scenic artist was commissioned to decorate the central stage floor area with a design styled to enhance the lighting effects for the first production.

From get-in on the first Sunday of the season, full transformation was completed in just one week and the first public performance took place earlier this year.

Brian Larcher is the director of marketing at The World of Shakespeare. He was assisted greatly in the preparation of this article by Alan Cohen of HS&HSL and Tony Aldridge.

SEMINAR PROGRAMME

12, 13, 14 SEPTEMBER, 1993

Victoria Room, Earls Court 2, London SW5
during the PLASA Light & Sound Show

• FUTURE TECHNOLOGIES •

Chair: Tony Gottelier, L+SI associate editor

The keynote seminar will look at the impact of 'future technologies' and offer some insight into just what we as an industry may be up against in the years to come. This may well prove to be an eye-opening experience for those who have yet to realise the potential impact of the Information Super Highway and forthcoming applications of Virtual Reality.

• RETURN TO DMX512 •

Chair: Peter Brooks, Zero 88 Lighting

The seminar will be targeted at those who are about to use DMX or are experiencing problems with its application. There will be a brief overview of the protocol followed by a 'DMX' clinic with members of the audience invited to raise questions on DMX and other protocols.

• CBC STUDIOS •

Gil Densham of CBC Studios in Toronto will offer an insight into the TV studio set-up in Canada. The audience will learn of the innovative techniques being employed by CBC and its move towards increasing levels of automation. CBC have an impressive 14,000sq.ft studio which is completely pre-wired and features the latest moving lights and scrollers on the market, as well as employing a sophisticated computer software system to simulate lighting in real-time.

• THE LINK TO SOUND •

Allen Mornington-West of Quad Electroacoustics will discuss the number of protocols and formats which have been devised in order that audio - and by simple extension video, stagecraft and lighting - can be controlled remotely. The seminar will review existing protocols and signal formats. It will also seek to establish whether there is any desire to reach a common standard in order that all equipment might be controlled through a similar protocol structure.

• PINK FLOYD AND MORE •

Well-known for his work for some of the top performance artistes, Mark Fisher, formerly of Fisher Park, will offer an insight into the design processes that produced the stunning stage sets and multiple entertainment technologies for the recent, much praised Pink Floyd and Rolling Stones tours.

• RIGGING FOR SOUND •

Chair: Andrew Martin, ATM Flyware

This seminar will cover the technical and practical aspects of rigging for sound. Highlighting important safety issues, the discussion will also focus on loudspeaker rigging in particular, encompassing touring event and fixed installations.

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• ANGLO-GERMAN DISCOTHEQUE •

Chair: Colin Gawne, World Discotheque Review

A comparison between British and German approach to design will form the basis of the discussion with contributions from some of the leading exponents in the nightclub industry from both countries.

SPONSORED BY BEDA

• ACOUSTICS FIRST •

Chair: Peter Mapp

Peter Mapp will steer the audience through a two-tier approach on acoustics discussing first the planning and licensing applications for entertainment venues and secondly, acoustical considerations when designing and installing sound systems.

SPONSORED BY THE SOUND & COMMUNICATION INDUSTRIES FEDERATION

TIMETABLE

MONDAY 12TH SEPTEMBER	TUESDAY 13TH SEPTEMBER	WEDNESDAY 14TH SEPTEMBER
11.30 AM ~ FUTURE TECHNOLOGIES	11.30 AM ~ LINK TO SOUND	11.30 AM ~ ANGLO-GERMAN DISCOTHEQUE
14.30 PM ~ DMX512	14.30 PM ~ PINK FLOYD	14.30 PM ~ ACOUSTICS FIRST
16.15 PM ~ CBC STUDIOS	16.15 PM ~ RIGGING FOR SOUND	

BOOKING INFORMATION

The information contained in this programme is correct at the time of going to press. Although the organisers will endeavour to present the seminars as scheduled, they reserve the right to alter the programme without notice. For the latest information on the full speaker line-up, please contact the PLASA office on (0323) 410335

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ASLEEP IN THE STALLS

There are times when I despair of my fellow critics, and they are usually the times when they're reviewing musicals. Collectively, they don't like the genre - or don't like admitting it in public. Individually, they either go off into raptures about the brilliant but increasingly elitist Stephen Sondheim, or are for ever harking back to pre-war greats whose work they've only seen in tatty revivals or in Hollywood versions on Saturday afternoon telly. Some of them manage to do both at once, but either way you can be pretty sure that when a new musical turns up it's in for a hard time unless it's by Sondheim. What is also infuriating to me, and probably even more to theatre folk, is the minimal attention they pay to the technology of musicals, except for the occasional sneer about coming out humming the sets.

Two London openings, within a week and coincidentally under the same management (Apollo Leisure and Barry Clayman), of *Copacabana* and *Fiddler on the Roof* brought out a rich display of the usual prejudices. The former, although new, was a pastiche of the very old-fashioned musicals the critics profess to love, yet failed to please most of them. In spite of two lengthy articles in the programme about the set and costume design of a show which is the last word in state-of-the-art theatre technology, there was barely a mention of the staging beyond a few 'oohs' and 'aahs' at Hugh Durrant's marriage of Carmen Miranda and Florenz Ziegfeld in the showgirl costumes. The Evening Standard picked up on the 56 projectors, but that was pretty well that.

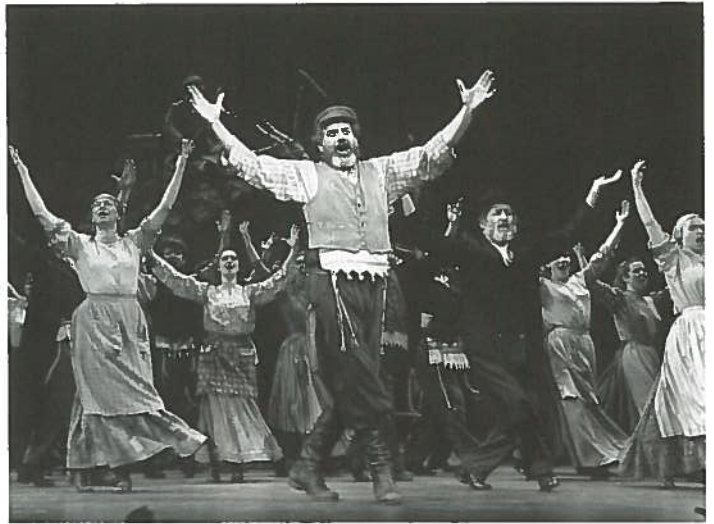
Now those of you who read Robert Halliday's fascinating article in L+S's April issue will know that apart from some fabulous costumes and highly innovative projected scenery, there was rather a lot else going on in Copacabana's lighting and sound departments. No one expects the critics to have seen Robert's piece, but I do wonder just how their reviews might have changed if they'd known what to look out for in these areas. (I didn't read it in full myself until this morning, so I too missed out on the chance to spot which numbers were mimed to John Del'Nero's pre-recordings. All I can say is that they obviously worked a treat.) Robert predicted that "the London critics will hate the show, but it will run." Part one has come true - I'm inclined to back him for the double. Copacabana is an immensely likeable show.

It's a kaleidoscopic spectacle with a full count of affable if unmemorable tunes, some highly energetic and very well drilled dancing, a plot that brings the requisite happy ending, and delivers lots of fun and excitement along the way. Hugh Vanstone's lighting makes a great contribution and the noise of all those Vari*Lites is less obtrusive than usual. The filmstrips in the Panis move the action along splendidly, and although there is none of the brilliant visual innovation of the ill-fated Snark in the projections, they enable scenes to cross-fade and change with tremendous slickness and speed. I have only a few minor quibbles to report.

For instance, apart from the splendid New York skyline, the screen projections looked no more than what they were, adaptations of contemporary magazine illustrations, and rather dull illustrations at that. I'd have liked to see the screens contributing more of a lift - as it stands, they're functional rather than decorative. Hugh Durrant's costumes, too, outside his fabulous night-club scenes, suffer from his dedication to period - the show is set pretty firmly in 1947. That's not the greatest of times for sexy offstage dresses, and all the colour and appliqué can't hide their



Pani projectors provide the New York skyline in Copacabana.



Topol as Tevye leads the cast in Fiddler on the Roof.

essential ugliness. Then the sound is of a very high standard, but from where I was sitting on the second press night the orchestra definitely outplayed the cast, a fairly elementary error of balance that should have been fixed by then. My final niggle is with the balance of the orchestra itself, which has all the necessary brass for the Manilow soft-rock sound, but relied on synthesisers for its strings. With so many ballads in the score, a little of the real thing would have made for a much more attractive sound.

No such band problem for Fiddler, where half a dozen real strings in full evening dress responded to Nick Barnard's baton in the Palladium pit. Most of the critics greeted the show, and particularly Topol, as an old friend, for here was an almost perfectly preserved 30 year old production, complete with the late Boris Aronson's Chagall-inspired designs, Pat Zippodt's folk-inspired costumes and Jerome Robbins's just plain inspired choreography, with some rather less inspirational present-day lighting and sound to back it. The original production was a design landmark (Aronson, then at the peak of his career, went on to design Cabaret and several shows for Sondheim at his own peak), but this revival provoked some critical murmurs about museum theatre. In truth,

I longed for something in the show to suggest that times have changed, both in the theatre and in our attitudes to the pogroms and ethnic cleansing which lie uneasily behind the jolly Jewishness of this Fiddler.

Here was Topol playing the part which made him famous, first in Tel Aviv and then in London (the film also helped), having now reached the

age of his character, the unputdownable milkman and amateur theologian Tevye. And here was Topol, miked beyond belief to soar boomily above the company and the orchestra whether or not he had the lead line, and acting in a strange stiff manner that suggested he might have been replaced by a Topol android, programmed to philosophise its way around the stages of the world on Fiddler tours for the next 30 years. Is this old-fashioned musical really concealing the ultimate in high-tech developments - the virtual reality star?

There was much more attention from the critics to Anthony Ward's set and Mark Henderson's lighting for *Sweet Bird of Youth*, Richard Eyre's latest Tennessee Williams revival at the Lyttelton. Interestingly, it reflects some of the design aims of Copacabana, with its imagery equally rooted in Hollywood, to the extent that Ward has chosen to frame succeeding scenes in different cinema-screen shapes of proscenium opening, even changing them mid-scene to adjust our focus. The colour of his backdrops, too, is early Technicolor, and the stage-height venetian-blind screens that look out on them are echoes of similar (this time projected) screens in Copacabana's Havana. It all gives the sense of heightened, overheated realism that Williams demands.

Mark Henderson also supplies another discreet lighting plot for *A Collier's Friday Night*, the D H Lawrence revival at Hampstead, though his use of 80 odd lanterns for the tiny Hampstead stage is hardly modest. For this tale of Northern parental tyranny Robert Jones has built a busy, highly practical set (a range to bake bread and heat water, a deeply symbolic kitchen sink and a host of candles) in considerable contrast to the funereal black noted in the rather similar *Rutherford and Son* (see July issue).

The latest example in the growing catalogue of ugly black sets is Bob Crowley's monstrosity for David Mamet's *The Cryptogram*, which Rick Fisher brightens up occasionally to reveal glimpses of other rooms through its gauze. Neither he nor Crowley throw much light, symbolically or otherwise, on what is a very dense play, too short to make any deep impact and too wilfully obscure to deserve it.

Ian Herbert

ACCESS ALL ARIAS

Walter Mirauer dons his tux and discovers what Yorkshire folk get up to in the Park

The public's appetite for al fresco opera has been growing quietly for a while, but really took off with the ruling triumvirate's spectacular concert for Italia '90. While Pavarotti, Carreras and Domingo were re-establishing megastar status for themselves and their genre on a scale not seen since the days of Caruso, Tauber and Gigli, more and more outdoor operatic events were being staged and planned, even as far away as Leeds, where the enlightened leadership of the City Council began sponsorship of what has now become one of the biggest events of its kind.

'Opera in The Park' began modestly, with a few thousand opera buffs scattered around the grounds of Temple Newsam House, a former coal baron's pile at the sound eastern edge of the city, there to be entertained by the leading lights of Opera North, normally based at the city's Grand Theatre. Never an elitist outfit, Opera North clearly struck a rich and populist seam with their programmes of arias representing opera at its most palatable and demand for the (free) tickets for this now annual event has mushroomed. All 45,000 tickets for this year's bash were snapped up in days, and Leeds being Leeds, while some folk drove up in Rollers, others simply wore them. Hilaire Belloc would have loved it.

Serving up a satisfying sound mix of full orchestra, chorus and soloists to a hungry horde of 45,000 on a very open site is no easy task. Andy Baker of B&H Sound Services and Tim Boyle of Concert Sound to whom it fell, really deserved a credit in the official programme alongside soloists Josephine Barstow, Arthur Davies and Keith Latham, not least for stretching the budget to allow some top class gear into the act.

Enter EAW. I first heard these speakers in the open air at the Cambridge Folk Festival some 10 years ago and was very impressed. Since then, they have progressed to a position of dominance for big gigs, thanks to the likes of Eric Clapton, which has all been good fun and great business, but prompts me to an



45,000 of Yorkshire's finest settle down for their night at the opera.

"All 45,000 tickets for this year's bash were snapped up in days, and Leeds being Leeds, while some folk drove up in Rollers, others simply wore them. Hilaire Belloc would have loved it."

observation. The sound reinforcement criteria for a Clapton concert and Opera in The Park are substantially the same: the overriding need is for power coupled with accuracy. If anyone

still doubted this after Saturday 16th July in Leeds, they had only to wait until Sunday 17th in Los Angeles where Domingo, Carreras and Pavarotti (who looks more like Bluto every time I see him) really blasted the point home.

For Leeds, Concert Sound deployed two five by three arrays of KF850s plus two arrays of five SB850s, stage left and right, augmented by a total of seven delay towers (four at 55 metres and three at 105 metres to give you an idea of scale), each comprising two KF850s supported on a Superlift. That's 44 KF850s plus 10 subs. Before we get too carried away with numbers, let me pause and remind you that, at peak level, that lot translates to one watt for each member of the audience. By comparison, arena concerts like Wembley and Sheffield would normally provide about seven watts per seat, and they are, of course enclosed spaces with walls.

The only help (if help it is) at Temple Newsam was a bit of slap, but no tickle, from the facade of the house itself, approximately 200 metres away from the stage. For the rest, this truly was a free-field outing, and the EAW's coped well, demonstrating none of the lobing or comb-filtering which can so easily bedevil this kind of set-up. Before leaving the field and going backstage, I must admit to some interest in creating 'electro-acoustic' walls for this kind of gig - the idea being to simulate, in terms of frequency and time, the reflections of an actual wall, but using extra loudspeakers, peripherally placed to do it.

This would be a bit like the many and well-known techniques and attempts to recreate a concert hall ambience within a small domestic listening room, only in reverse. Even such a system would not have helped with what



Paired EAW KF 850s on superlifts formed the delay towers at 55 and 105 metres from the stage.

proved to be the biggest (and almost the only) problem on the night, to wit a capricious light breeze which blew more or less across the stage, but seemingly at random and in both directions, distorting the shape and perspective of the mix, and keeping B&H's Andy Callin on his toes all the while.

The only way to defeat this effect would be to employ a very large number of small, wide dispersion full-range speakers in serried ranks through the audience every 20 metres or so, together with dozens of carefully set delays. That would be both an economic and a logistical nightmare and would risk destroying that special 'open-air' ambience. I suppose the effect of a bit of breeze around the PA is rather like the odd fly getting into the Pimms, it goes with the territory.

Power for the EAW loudspeakers was provided by BGW GTA amps, eight racks of four each for the stage-side arrays and one rack of four for every two delay towers. Operating into four Ohm loads, as Tim Boyle prefers to do, these units provide around 800 watts a side, which on the audible evidence is about right for these speakers. Concert Sound's loyalty to BGW, which as a brand has been through a thin time over here of late, but which used to be a pacesetter in power amp design, is both touching and an eloquent testimonial to their ruggedness. Lab Gruppen is the only other amp Tim Boyle uses. The control rack for the main PA was a simple affair, sporting a CD player, two Klark Teknik graphics and EAW's dedicated controller. So too were the racks for the delay towers, comprising a BSS delay, two KT's, an EAW controller and a Yamaha 2040



The main stage as the chorus of Opera North prepares for action. B&H rigged the Lite Alternatives design.

(unused) for back-up. Add to this little lot a mic layout with as many items on it as the lighting plan, drawn up by Lite Alternative Design, and you have the full tour de force.

It doesn't stop at that. Opera in The Park forms part of the Live At Leeds music festival and the next night saw the same rig used to host

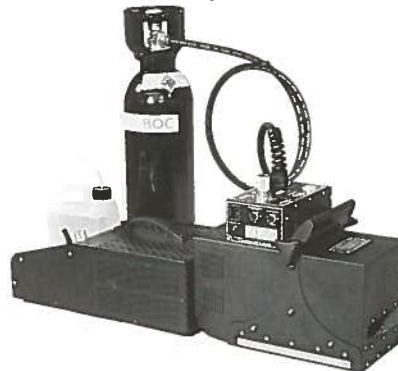
a contrasting event, Party in The Park featuring a selection of chart-topping bands.

Very different shows then, with very different audiences, but a strong endorsement for the versatility and sheer quality of the sound system. Don't talk to us about sophistication, we've been to Leeds.

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ALD: FOCUS FOR 1994

Ruth Rossington takes a fresh look at the Association of Lighting Designers

It was getting to the stage where I began to wonder whether newly appointed ALD secretary Chris Watts and I would ever meet. Such was the protracted nature of our various attempts to get together, hampered by rail strikes, that I began to contemplate revising my title as I was in danger of missing the deadline. I suspect Chris Watts got wind that I was a difficult one to pin down and as Mohammed was not going to be coming by train to the Mountain, so the mountain upped sticks and headed for Mohammed.

I mention this not to hint at any reticence, but purely to illustrate that some things in this life are hard come by, and this article, and the reputation and standing of the association it covers, are but two examples. There will be many in the industry who've never heard of the ALD, and an equal number, no doubt, who know the name but little of its history or achievements - it's a best kept secret that's about to be blown.

The Association of Lighting Designers was formed in 1963 by six of the leading names in the industry at the time - Joe Davis, Richard Pilbrow, Michael Northen, Bill Bundy, John Wyckham and Charles Bristow. It grew out of the Society of British Theatre Lighting Designers - a club so exclusive that any designer applying for membership had to list no less than 14 West End Shows to his credit.

With the explosion of lighting design within the creative process of stage production in the late 1980s and early 1990s, and the proliferation of lighting elements in educational courses in many colleges and institutions, it was inevitable that the 'exclusive' tag would soon go. To their credit the original members opted to expand membership in 1981 to include lighting professionals from all fields. After original proposals that the new association should be a trade union, the first executive decided to create an organisation that embraced negotiations through the established trade unions, but also allowed the ALD to develop as a friendly society - an open forum for the discussion of lighting art and the appraisal of production techniques and equipment.

It's often at this point in an association's development that a fork in the path is reached. It can either sit back and simply react to events or it can come out of the corner fighting and be pro-active. The ALD chose the latter, and as a result has become a major mouthpiece of the UK lighting industry and one of the main resources for information. The current acknowledgement of the creative importance of the lighting designer in both the theatre and commercial environment is probably largely ascribable to the ALD. But the role of the association has not simply been about achieving recognition for its members - it is very much an active organisation with responsibilities to end users of lighting design, as well as to the designers themselves.

Chris Watts, a freelance lighting designer, currently working with Theatre Projects, was recently elected to the role of secretary following the departure of David Taylor to TP in the States. He is excited about the continuing role and revitalised importance of the Association. His extensive direct experience on both sides of the Atlantic as a lighting designer for theatrical productions and as a member of the project design team with Theatre Projects



Chris Watts, secretary of the ALD.

Consultants puts him in a good position to understand exactly what is needed by the members of the ALD and what still needs to be done to communicate the message of the Association to end users. "Lighting is an art form which is used by people on a day-to-day basis, but it is still underrated and misunderstood," he explained. "The ALD is a respected mouthpiece for lighting designers which can help both users of lighting and practitioners in the field to achieve better results."

Chris is keen to encourage a dialogue between the executive of the ALD and its members to ensure that each sector of the industry is represented and their interests and concerns aired. A large part of that process is fulfilled by a monthly newsletter - Focus - edited by Nick Hunt. Its raison d'être is obvious - a blank page on which members can make their mark, and judging by the recent issues, they ain't backward in coming forward.

Talking to Chris Watts (who by now is sitting in my chair, at my desk, eating my chocolate biscuits), it becomes clear that the limited resources of the Association will in no way restrict its ambitions. "I would like to see the role of the Association become more for the designers both present and future, by being a source of information and advice for designers

and managements. I feel that the ALD should become more involved with the advancement and ideas within the lighting field and have an active role in keeping lighting to the front to give it focus for the future.

"We are here to advance the standards of lighting graphics and will continue to involve ourselves in as many projects as we can, so that as many people as possible can enjoy lighting in a range of styles and fields.

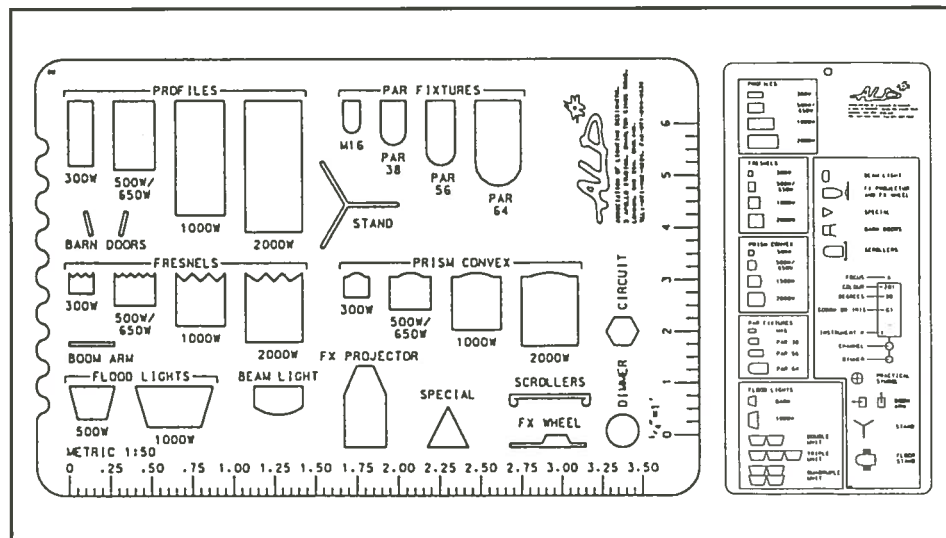
"Lighting is an art form and we are dealing with designers that have an understanding of the elements of life, which they reproduce for us in a wide variety of forms. The Association will only survive if the members become more involved with its activities. I hope that the members around the country will become more active and that students will find the association a useful source for meetings and advice. I'm also very keen to encourage companies to become corporate members."

The membership drive is a necessary part of the lifespan of any association and the ALD is determined to attract as many new members as possible. There are five main membership categories: full, country, associate, student and corporate. Full membership, the most costly for the individual, will set you back a massive £25.00, so you can be sure that whatever category you fit into, it isn't going to break the bank. Companies are, of course, asked to contribute a little more, but at £150.00 for membership, it's hardly asking them to dig deep into the corporate coffers.

The Association has an impressive roll call with Robert Nesbitt as president and Michael Northen as chairman. As well as leading lighting designers from Britain, including Andrew Bridge, David Hersey, Robert Ornbø, Rick Fisher and Chris Parry, it also has over 20 members overseas based in such far-reaching places as Scandinavia, the United States, Portugal and Hong Kong.

The members, which now total nearly 400, come from all ends of the lighting design spectrum ranging through architectural, theatrical, television, film, special effects and lighting product design to educationalists in the field. There is also a large student membership and a healthy associate membership amongst those who are indirectly involved in the profession.

The immediate aim of the Association is to



A new initiative: the ALD's generic templates for designers (not to scale).

double the membership. To qualify as a full member, a designer must be actively earning the majority of his income from lighting, though there is currently a debate taking place in the pages of Focus about the privileges of full membership, and part of the criteria may well be revised.

The ALD is one of only a handful of associations specifically for lighting designers. In the UK, the Society of Television Lighting Directors performs a similar role, but as its name suggests, represents the interests of a small section of the industry. In America, the International Association of Lighting Designers (the two organisations are not linked in any way, though Chris Watts is trying to encourage an international dialogue with them) has a large membership, but again the emphasis is not as broad as the ALD's and the IALD has bedded down with architecture.

With the increasingly diverse applications of technology, Chris Watts acknowledges that the ALD will need to broaden its horizons yet further, and it would take a brave man to predict what the next century might bring. Whatever it is, Chris hopes that the ALD will be ready to respond to the changing face of the industry. This flexible approach allows much more room for manoeuvre and the Association is able to draw on a much wider reserve of talent: people are after all one of its main resources.

Nowhere better is this demonstrated than in one of the most successful aspects of the association's work - the visits organised by members for members. This has taken them backstage at many venues, including most recently the Savoy Theatre. Added to this there is a coterie of highly respected designers, who've been in the industry longer than most of them care to remember, who are always

willing to share their hard-earned knowledge with younger members.

Further practical steps are being taken in other areas. At the instigation of Ian Albery of Donmar, the ALD were asked to design a totally generic graphic standard, which would cover a broad range of equipment and reflect the international nature of some products, the Parcan being a case in point. The ALD have now done that and they hope that the graphic template will be available shortly.

The association is also widely represented on a number of bodies and committees. Robert Muller represents the ALD's interests in the current round of NVQ discussions: David Taylor voiced its concerns during recent discussions on the safety of smoke machines, and members now sit with Equity on the designer's committee.

The Association doesn't actively pursue any political aims and has deliberately shied away from any direct contact with parliamentary initiatives. However, it has been involved in promoting safety aspects and, if not as a collective body, its members have individually lobbied manufacturers to improve product design and specifications. The Association will also, when required, act as arbitrator to resolve any differences of opinion between two parties.

The key to any Association's success is communication and if you can crack that nut

you're on your way. So, in addition to all the other mechanisms in place to achieve more talk, a further initiative is a programme of regionalisation to cater for those not based in London (which, if allowed, tends to view itself as the centre of the Universe) so that the opinions of those further afield can be gleaned and added to the pot.

Aside from its presence at various trade shows, the ALD will also be involved with Theatre Design 94 in Manchester this autumn, where, for the first time, lighting designers will have an opportunity to display their work, not only through photographs and plans, but also practically in a performance area.

And pretty soon there'll be a Membership Directory, the first time the Association has published one, which will not only raise the profile of the Association, but also act as a springboard for its members.

So, there you have it - their cover's blown. The secret army of the ALD is on the march, and under the very active leadership of chairman Michael Northen and with the enthusiastic day-to-day input of Chris Watts, the Association is set to enter a new era - the results we hope will be illuminating.

Oh, there's one thing I forgot to mention. The Association has no paid executive, no offices, no full-time staff - just a lot of foot soldiers committed to putting lighting on the map.

For further details on membership contact:

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EQUIPMENT *News*

Yamaha M2000



Yamaha has turned its attention to the mid range touring and theatre market with the introduction of the M2000 Series live mixing consoles.

The compact size of the M2000 and the interchangeability of mono and stereo input modules allow large channel configurations to be used. The 16 channel M2000 is only .97m wide and the 40-channel version 1.7m wide.

In addition to the two group stereo modules fitted as standard, four mono channel modules can be replaced by additional four group stereo modules, allowing for several possible mono/stereo channel combinations.

On the automation front, a group of eight direct recall buttons each recall a programme from the 128 storable scene memories. These allow instant access to the eight most commonly used pre-programmed mute configurations, across the input channels, aux returns and output bus. External MIDI control allows individual channel and bus muting or scene memory changes to be run from a MIDI sequencer. The console also transmits MIDI programme change data, enabling programme changes in external signal processors to be made simultaneously with console scene memory changes. The 13 x 4 submix matrix can be used to mix the group, stereo, mono, and sub-in bus signals to four sets of independent outputs. Each matrix bus has both balanced XLR and unbalanced 1/4" jack outputs with independent master level controls and on/off switches.

The six independent aux sends on each input channel allow for even the most ambitious effects set-ups and the first of these can be switched to pre or post fade. The four stereo returns are equipped with independent level control and two band EQ and feature the same bus and panning facilities as the input channels. An EQ switch allows the equalizer section on each channel strip to be switched in and out, while an 80Hz high pass filter aids the elimination of low frequency rumble. In addition to the large VU meters with peak reading LEDs, for the stereo and mono buses, eight assignable VU meters can be used to monitor signal levels on the group, matrix, and aux buses.

For further details contact Yamaha-Kemble in Milton Keynes, telephone (0908) 366700.

M-People

CP Cases have introduced the M-Rack, a low-cost modular installation rack frame constructed from rigid steel tubular sections. The basic frame, available in 12U, 15U, 19U, 24U and 33U heights and two depths of 600mm and 800mm, is epoxy powder coated in two-tone grey. It is easily assembled, requiring no special tools, and the result is a very rigid close tolerance cage. Horizontal mounting members provide full adjustability for vertical rack support rails.

For details contact CP Cases in Isleworth, telephone 081-568 1881.

Round Videowall

As originally reported from SIB, a videowall with a difference has been launched in the UK by video projection and large screen display specialist Owl Video Systems. Featuring 360 degree all-round visibility, the wall is based on a new 28 inch wedge-shaped videowall monitor developed by Owl - the SMV 280W. The back casing of each monitor is sharply tapered and allows the curvature of the wall to be very tight - a circular configuration can be achieved with as few as nine monitors.

The wedge monitor complements Owl's existing standard 28" unit, the SMV 280N, allowing a full variety of videowall systems to be created. A multitude of configurations is possible - rounded corners, semi-circles, gentle curves, videowall tunnels - with the monitors stacking up to 12 units high. Other features include a Black Matrix screen, power/signal loop-through circuitry and colour temperature switching for studio and broadcast use.

Victoria Station in London was the venue for the first public display of the videowall which was configured as three 3 x 3 walls with a nine-monitor text ring at the top. Programming was provided by Sky News, Volvo and BMW, with extras effects generated by Kaleidolight and ELCA systems. The wall was controlled by Videesel image processors, distributed exclusively in the UK by Owl. The company also supplies the specially-constructed steel frames to house the new monitors.

For further information contact Owl Video Systems in Uckfield, telephone (0825) 766123.

Spreading Your Way

The Wildfire Effect from Wildfire utilises high power longwave ultra violet or blacklight and depends upon two key elements. The first of these is Wildfire's range of 400 and 250W blacklight projectors. These lamps, available in spot, flood and ellipsoidal variants allow UV to be treated like visible light, projected over distance, shuttered, dimmed and even strobed. The creative potential is great and has been quickly taken up in movie special effects and theme park rides. The second key is the large and ever growing range of luminescent materials and finished goods. These materials, ranging from paints and invisible lacquers to lipsticks and hair gel, have all been specially developed. They carry very high pigment loadings and provide greatly extended UV active lifespans.

Wildfire of Hollywood (GB) Ltd holds exclusive distribution rights from Wildfire Inc in Los Angeles in respect of Europe and Scandinavia. Sub distributors are now being appointed.

For further information, contact Wildfire in Leeds, telephone (0532) 492020.

Soundmaster VF 1000

The new Soundmaster VF 1000 Mosfet power amplifier will deliver over 500W per channel into a four ohm load or 1000W into eight ohms in bridge mode. The unit has forced air cooling for multiple power devices mounted on large heatsinks. Thermal sensors protect the amplifiers from overload, while power up sequencing circuits control the turn on current and mute the output during start up and shut down. The front panel display features peak, channel on, protection and bridge status indications. The amplifier is contained in a 2U chassis and weighs less than 20kg. For details contact M-Jay Electronics in Leeds, telephone (0532) 524956.

More Fireworks



Mainstage Presentation Technology has announced that a new range of theatrical pyrotechnics is about to be launched under the Blakes Fireworks banner. In designing the cartridge it was recognised that the traditional two pin system was difficult to locate in the dark, and the sockets which received the pin were prone to wear.

To overcome these problems, a central jack plug type pin is incorporated, which fits easily into the robust brass anular ring socket on the firing pod. Neither component is likely to wear out and the brass ring shows up target-like in the dark, making it easy to locate in low light conditions.

Effects including theatre flash, silver star, coloured fire, coloured smoke plus glitter, streamer and confetti cartridges are available, together with a small adapter which allows Blakes cartridges to be used in other firing systems.

Mainstage is currently seeking agents for UK and world-wide representation. For further details contact 061-834 8004.

Ramsa Two-Way

A new near-field speaker has been added to Ramsa's range of professional audio systems. This two-way bass reflex unit, the WS-A35, features high power output with wide sound dispersion and has been designed for background music applications.



The WS-A35 is a compact unit, measuring 385mm(w) x 230mm(h) x 220mm(d), which offers smooth sound expansion achieved with a built-in Ramsa WG Horn. Developed using the Wave Guide theory, the WG Horn enables coherent, low distortion and constant coverage performance (as WG boundaries achieve a constant radial distance from the radiation axis). Constant coverage is maintained through the highest frequency of the drivers range via the spherical 90 degree horn which delivers wide range constant directivity and performance.

The WS-A35 woofer has near-field tuning to suppress ambient sound resonance. A thermal protector is also built into the unit to prevent prolonged excessive power input. To protect against magnetic leakage from video monitors it has been specially shielded with a separate cancelling magnet and shielding pot structure.

The moulded enclosure utilises a durable and vibration-absorbent resin designed to decrease internal resonance. In addition, special cuttings have been added to either side of the speaker panel to eliminate distortion and sustain uniform directivity characteristics.

The new two-way WS-A35 speaker is available through a network of Ramsa dealers. For further information call (0344) 853176.

ShuttleCAD Upgrade

ShuttleCAD version 3.0 is currently being beta-tested in Europe and North America. The new version is based on FastCAD and is said to be considerably improved. The results will be collected and processed from the end of September with the formal release of version 3.0 expected to take place in the last quarter of this year. For further details contact Shuttlesound in Mitcham, telephone 081-640 9600.

Vital Link

Allen & Heath have introduced the Sys-Link expander interface system, enabling two or more of their GL2 rackmountable mixers to be linked together via a single 25-way interconnection cable. Up to five GL2s can be linked, with all audio and control busses joined electronically for optimum performance. Additionally, Sys-Link connects the signals directly to the console busses, avoiding the use of main console outputs and channel inputs for the master/slave connection.

Two GL2s can now be connected for eight track recording, with group outputs selected or disconnected simply by breaking the link, thus enabling full eight track monitoring facilities required for studio recording applications. Two Sys-Link packages are currently available: a two-off system suitable for linking a pair of GL2s and a one-off system for expanding more GL2s onto the existing system.

For details contact Harman in Borehamwood, telephone 081-207 5050.

New Generation Radio

Sennheiser have introduced the SKM5000 hand-held transmitter system. It features 16 switchable transmission frequencies within a 24MHz bandwidth for maximum transmission safety, avoiding multi-path receiver interference and facilitating on-site frequency configuration within multi-channel set-ups. The super cardioid condenser capsule provides a precise pick-up characteristic with high rejection of feedback and ambient noise. A range of interchangeable omni-directional cardioid and super-cardioid condenser and dynamic capsules add flexibility.

It has five stage AF preamplifier, switchable in 10 dB steps, for extended modulation control limit, a maximum SPL of 151dB, exchangeable accumulator packs, integrated within microphone casing with remote indication of remaining operating time, and a fully integrated antenna.

For further details contact Sennheiser in High Wycombe, telephone (0628) 850811.

Doris Dithers in Dilemma

We get some weird and wonderful press releases at the offices of L+S, but this latest from Light Engineering is the current pick of the bunch.

Q) Dear Claire, I have a dilemma. There are two dazzling men in my life and my dichroic heads in a spin. Cyril is amazing. The things he can do on a flat surface are quite astounding. I suppose the nearest description would be that of colourful moving wallpaper but, what a mover, almost at the speed of light - it's quite exhausting. On the other hand there's Roger. I am convinced he has a split personality although both sides are quite enchanting and somehow seem to swing in sympathy with each other. I know that they are both after me but which to choose? They both wear the same sleek dark coating, just like me, and both have outstanding features which positively beam with vibrant colourful energy. Please help!

A) Well, my dear Doris it does seem that you have a problem. In the end you will have to follow your M33 heart and I am sure you will make the right choice. Or perhaps you could see them both, on and off, until you're more sure. It may also be a good idea to take them both to the PLASA Show in September - then I am sure you will get some good advice from all your existing admirers.

If you think Doris, Roger or Cyril, may be what you're looking for contact Light Engineering in London, telephone 081-520 2336.

Maxlight Revision

DLD Productions have upgraded the Maxlight. A complete re-design of the reflector using CAD technology has resulted in 20% more efficiency. A 500W lamp mounted in a Maxlight reflector now produces more than double the light output of the 1000W CP60, according to the company.

A variable focus system is now available. Thus a simple twisting motion will result in a smooth and reliable beam adjustment. The latest lamp holder design utilises a high temperature socket which ensures improved lamp retention, accurate positioning in the reflector and high temperature lead out wires. The Maxlight has a lower running temperature than a sealed beam unit and its new cooling system will enable gels to last longer.

The Maxlight weighs less than a Par bulb and is available in a variety of widths from a very narrow spot to a wide beam. It is ultra robust and built to withstand the rigours of touring. DLD have appointed Lite Smiffs of Northolt, London as their exclusive European distributors. For details, call either DLD or Lite Smiffs in London, telephone 071-613 3825 or 081-845 9337 respectively.

Silk Range from 3G

3G Ltd have just released a long-awaited replacement for their GA Series of professional mixing consoles - the Silk Series.

The 'live' models consist of either a 16-2-1 or 24-2-1 configuration with the emphasis on control. All auxiliary busses can be configured pre or post fader, whilst the direct output on channels can be set to either pre or post EQ. All input channels, master aux sends and returns have PFL or AFL switching. Insert points are standard throughout the mixer as are dedicated stereo aux returns.

The 'recording' models consist of a 16-8-16-2-1 and 24-8-16-2-1. These models have the same facilities as the 'live' mixers, but also benefit from additional features including full tape remix to channel, two separate headphone monitor outputs, twin two track connections with dubbing facility, studio monitor outputs, a line-up oscillator and internal talk-back mic.

All models are supplied with a heavy duty external power supply as standard and are covered by the usual 3G three year warranty.

3G have also released the Mark II versions of their popular range of professional power amplifiers, the HP Series. The new amplifiers all benefit from completely revised output circuitry. All models are designed and manufactured to be fully 'roadworthy', and the smooth response, uncoloured sound and passive cooling on the HP200 and HP400 make them suited to studio use and all other monitoring applications.

For further details contact HW International in London, telephone 081-808 2222.

Colortran SceneSaver

Colortran Inc has introduced the SceneSaver memory controller. It is a back-up unit which receives and transmits USITT DMX512 data, and stores 64 looks of 512 dimmers. Should the main control console fail, and stop transmitting DMX, the SceneSaver acts as a back-up controller.

The unit can combine eight of the 64 looks into its output simultaneously. These looks are grouped into two banks (scenes) of eight sliders. These two banks of sliders make up a split cross fading system, similar in operation to a standard two-scene control console. In normal operation, it is a Pile-on console which adds the SceneSaver looks to the transmitted data on a 'highest-level-takes-precedence' basis. The SceneSaver can be optionally increased to handle up to 2,048 dimmers.

Further information is available from Colortran, in Burbank, telephone (818) 972-5534.

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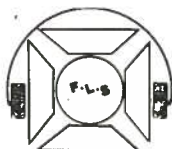
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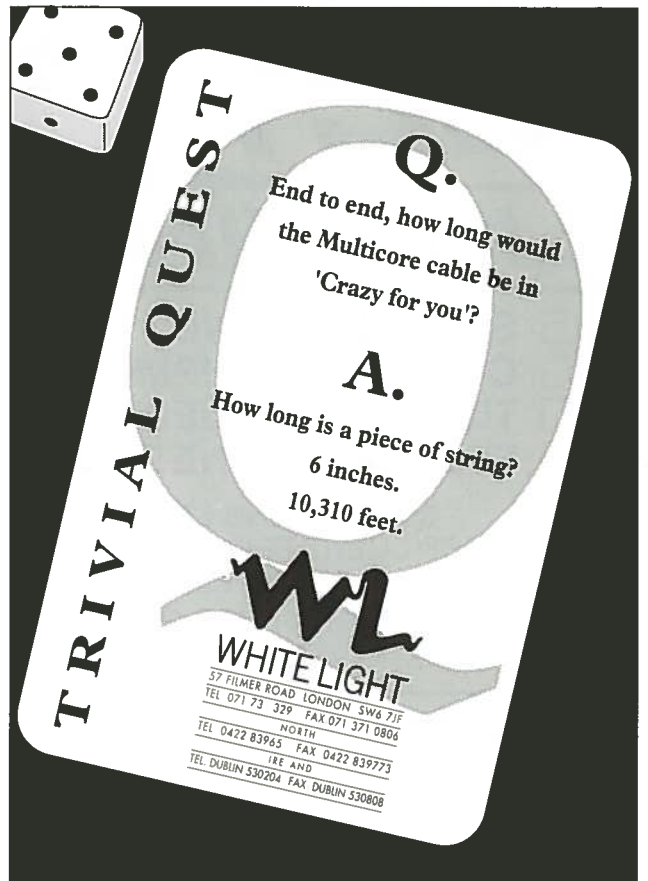
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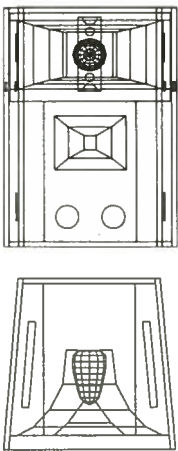
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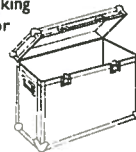
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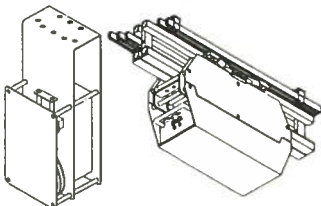
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VIEWPOINT

Robin Townley on Calamari and Competence

I set finger to keyboard having found myself opposite the assistant editor of Lighting and Sound International while consuming a huge plate of calamari. Not deterred by the delicious cuisine, I launched into such an overwhelming and unrelenting espousal of technical education that I suspect she felt she had no recourse, and even less chance of escape, but to suggest I put all down on paper.

My theme was the importance of education in these days of training, training and yet more training. My initial reaction when embarking upon such a discussion would be to reach for the OED. At least I would know the linguistic distinction between 'training' and 'education'. On this occasion however, I shall resist the temptation. 'Training' is appearing ever more frequently on the agendas of meetings attended by technical managers, heads of department, and technicians. Many of these await, more or less eagerly, the imminent release of the first fully accredited standards for National Vocational Qualifications in Stagecraft. In October, the British Council is to run a five day seminar entitled 'Technical Training for the Theatre Professional'. With all this concern about 'training', where is 'education'?

National Vocational Qualifications (NVQs) are gained by an individual who has been assessed against a standard and has been found competent at the job or task specified by that standard. The noble aim of the National Council for Vocational Qualifications is to establish industry specific qualifications which will accredit individuals as competent to perform real tasks in a real work place. Each NVQ standard is created by a lead industry body, which in the case of the Stagecraft standards is the Arts and Entertainment Technical Training Initiative (AETTI). The standards specify a task and a range of conditions or equipment in or on which the individual must be able to demonstrate competence. Each standard also stipulates an area of underpinning knowledge which it is judged an individual must have at their command in order to be able to perform the specified task competently. All well and good, and even better the intention that these qualifications should be delivered, both in terms of training and assessment, in the work place itself.

I entered the world of 'education' just after the inception of NVQs and was very excited at the idea of being able to provide someone not only with an education, but also a qualification which accredited their competence at work. An employer would be able to judge not only an individual's potential, but also their current skill level. Since those days, however, it seems that 'training' and NVQs have completely obscured 'education'. As a result I now experience an ever growing unease, for it appears to be ever more likely that 'training' will degenerate into instruction in the vein 'If light A comes on - push button B'. Many a competent electrician casual knows how to wire a three pin mains connector

and where the green and yellow colour coded conductor must always be connected. Whether they understand why is another question and one which is often glibly answered with the phrase: "It depends how well educated they are."

Surely it is this that employers are really interested in. They don't want to see pieces of paper claiming that a potential employee can already competently do all the tasks the job description requires. Employers want to see pieces of paper that go some way to confirming that a potential employee will be able to do any job required of them now or in the future. For me, this is the difference between 'training' and 'education'. 'Training' deals so specifically with context and content that it all too frequently obliterates the general. Instead of a broad understanding it offers a narrowly defined skill that becomes tied to the context and content. This is not to deny 'training' outright, and certainly not to denounce NVQs. There will always be a legitimate need for 'training' and it is not overstating the case to affirm that no-one is adequately prepared to work in the entertainment and theatre industries unless they have received appropriate 'training'. Yet it is essential that 'training' is found within an educational framework, not only for the employers, but for the industry, and most especially for the employees.

The Association of British Theatre Technicians (ABTT) have been involved in the debate about technician 'training' since the late sixties. Through their initiative there has been collaboration between the industry and educational providers for almost 25 years. Under the auspices of the ABTT the industry was able to demand exactly what it wanted its employees to know. For theatre electricians a day-release course was proposed. Over a period of a year trainee staff would be released from work for one day a week. They would attend a further education college where they would be taught, not trained, the underpinning knowledge the industry felt they should know.

Such was the extent of the underpinning knowledge requested by the industry that in consultation with the college staff the course developed into the City and Guilds 1810 Entertainment and Theatre Electricians Course and, later the 1820 Sound Engineering Course. It is pertinent to note that candidates who receive either of these qualifications will have had to demonstrate 'a generalised practical mastery of the technology used in their tasks so that they may progress to other applications in new tasks or new training without re-learning the main skill content of the process' and 'a generalised mastery of the science background required for a proper understanding of the technology used in practical tasks, so that they may progress to other applications of it in new tasks or new training without re-learning the background studies'.

Such requirements not only guarantee that an



employer has qualified staff who are able to adapt to new technology and working practices, but that individual employees are able to develop their own skills and careers within the industry: all this by ensuring that they have received an 'education' which will allow them to participate in 'training' throughout their professional lives.

So what is 'education'? Not something that is best described as a set of competences. It is, of course, the process of understanding: understanding of the fundamental principles, the theories and the concepts that allow individuals to master skills and become competent at complex and sophisticated tasks such as those performed daily by crews throughout the entertainments industry. By all means accredit an individual's competence in the vocational skills required by the industry, but not at the cost of the education for which the industry has already asked once before.

Robin Townley spent too much time lighting rock and roll gigs while gaining a degree in wildest Wales. He then went to Paddington College where he gained the City and Guilds 1810 Theatre Electricians Certificate and started working in the West End, whilst studying part-time at the Bartlett School of Architecture and Planning, University College, London. While working as a lighting hire client contact for Theatre Projects Services he became aware of the lack of opportunities available to those who wished to gain an education in the technical theatre arts and decided to get involved himself. His first teaching post was at Carmarthenshire College of Technology and Art as project manager for Theatre and Media Technician Skills. He is now a co-ordinating lecturer in the Faculty of Visual and Performing Arts at the City of Westminster College, where he is involved in the delivery, both within the College and at its venue the Cockpit Theatre, of specialist courses in Entertainment and Theatre Electrics, Sound Engineering and Broadcast Audio Engineering. He is an accredited NVQ Vocational Assessor.

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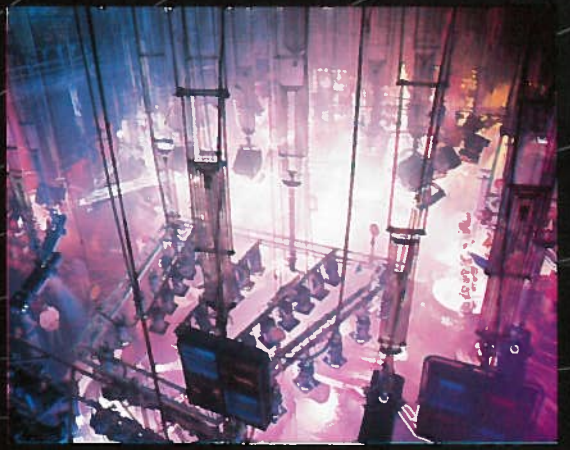
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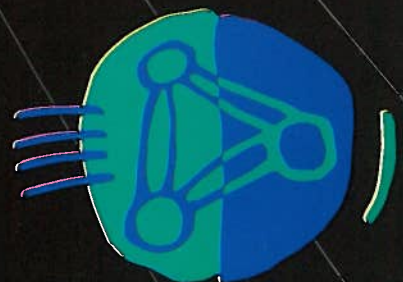


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