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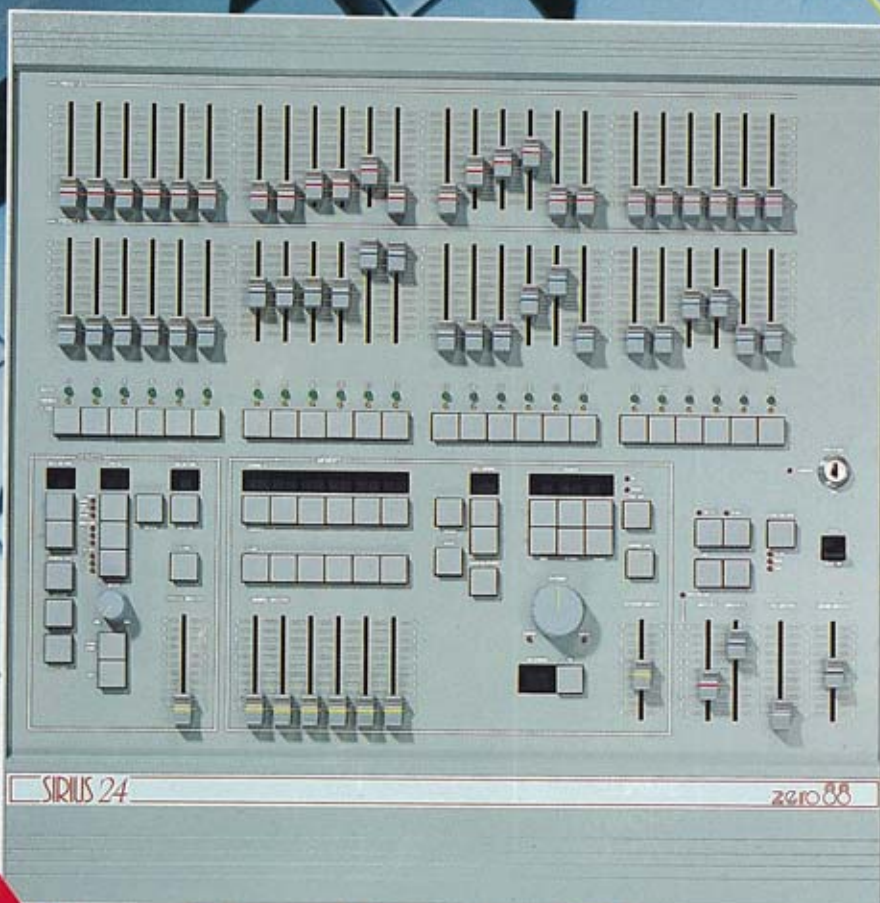
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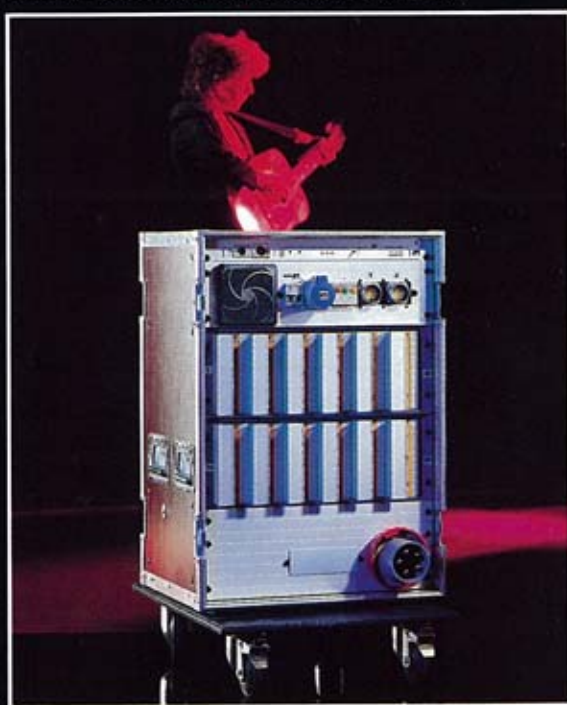


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LIGHTING+⁺SOUND

International

OCTOBER 1993

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

LIGHTING+⁺SOUND

International

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

Editor: John Offord
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Published from the PLASA Office
7 Highlight House, St Leonards Road, Eastbourne, East Sussex BN21 3UH England
Telephone: (0323) 642639 Fax: (0323) 646905

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The magazine is available on annual subscription
UK £45.00 Europe and rest of world £60.00 Airmail £85.00. Single copy price £3.50 plus postage

Editorial Advisors: Tony Akers, Peter Brooks, Wyatt Enever, Mike Gerrish, Matthew Griffiths, Kevin Hopcroft, Tony Kingsley, John Lethbridge, Ian de le Vingne, Iain Price-Smith, Neil Rice, Jackie Staines

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

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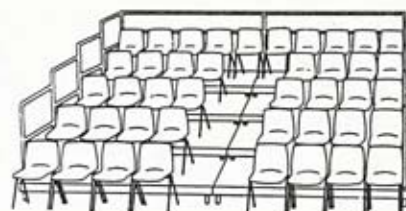
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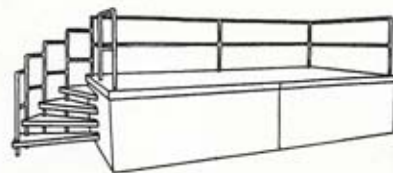
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PROFESSIONAL SHOW LIGHTING

PLASA - the Association Makes its Mark

Although the name PLASA is synonymous with its annual and highly successful Light & Sound Show - and there's plenty of evidence of that in this issue - the Association's chairman Tony Kingsley has drawn attention to the fact that PLASA is active in many other areas, with its name growing in stature year by year, both at home and on the international scene.

"The huge success of the 1993 Light & Sound Show reminds us of the hard work put in over the years by both past and present committee members and officers who oversaw the important move from Novotel to Olympia 2 in 1988, and our expansion to Earls Court 2 last year," he emphasised.

"It is immensely gratifying to see the Association owning and developing its own major world-leading international show for the industry whilst in parallel servicing its members' numerous other demands along the way. In addition, as a result of discussions at this year's show, it seems certain that we will also see PLASA taking a strong lead in the debate on lighting control protocols."

Vice-chairman Mike Wood echoed Tony Kingsley's comments: "You must remember that the four very visible days at Earls Court 2 perhaps overshadow the other 361 days of important work going on behind the scenes at PLASA. Work on international standards and the promotion of British companies overseas in conjunction with the DTI and our ever-growing international membership, continues all year round. Full credit should be given to the committee and staff at Eastbourne for the increasing profile of PLASA on the world stage."



Shuttlesound's Jasper Whittaker collects the Best Product award from PLASA chairman Tony Kingsley.



Sean Martin (Canon) and Peter Johansen (Martin Professional) jointly collect the Best Stand award.

Sabine Top at PLASA

This year's PLASA Light & Sound Show industry awards scheme, now in its second year, acknowledges the Best New Product and the Best Stand at the exhibition. Presentations were made to the winning exhibitors during the show at Earls Court 2 on Monday 13th September at 5.00pm.

With over 30 entries for the Best New Product award the judges came to a surprising easy, and unanimous, decision. The Sabine FBX 900 feedback exterminator from Shuttlesound was the outright winner as a unique and innovative solution to the genuine problems encountered with acoustic feedback. The judges felt that this product was particularly well suited to the smaller installation where the FBX 900's automatic operation comes into its own.

Three further products were highly commended by the judges: LSD's Icon which is

an effective lighting system providing a real alternative to the recognised market leader; the AVC2 automatic volume control unit from Formula Sound for a broad range of applications where noise levels must be restricted without compressing or limiting dynamic range; and DHA Lighting's pitching light curtain yoke is a niche product which is very effective for stage applications and can be fitted to any DHA Digital Light Curtain, providing the ability to move the light curtain beam through two axes.

The judging panel included Simon Bruxner-Randall, head of lighting design, Imagination; John Harrison, technical director Royal Opera House, Covent Garden; Mike Lethby, technical writer and freelance pro-audio journalist; Phil Soltys, proprietor, PSD Electronics; and Derek Gilbert, managing director, Glantre Engineering. George Thompson, PLASA's standards officer, chaired the judging.

First 9,000th Visitor



The 1993 PLASA Light & Sound Show saw its visitor count easily pass its target of 9,000 attending the show, with the total ascending to a massive 9,465 (1,458 from overseas), almost 1500 up on the 1992 total, itself a record. First-ever 9,000th visitor was leading lighting designer Paul Pyant who was welcomed into Earls Court 2 on the final day of the show by James Brooks-Ward (right in picture above) and PLASA's ever watchful chief executive John Offord.

Paul is lighting designer for the Royal National Theatre production of *Carousel* which transferred to the Shaftesbury Theatre on September 10th. He works regularly for both the Royal National Theatre and English National Opera.

After lengthy debate, the Best Stand accolade was shared by Martin Professional and Canon Audio for two very different design approaches. It was felt that Martin Professional's stand, rather than winning for sheer size, provided an extremely functional and well thought out space with a surprise around every corner that took 'the big, black lighting tent' onto another level. Canon, on the other hand, received unanimous approval for the creative approach taken to displaying a unique professional sound product, particularly where speakers had been incorporated into the stand's main mural.

Nicola Hynes, from the PLASA Light & Sound Show's PR consultancy, O'Brien Associates, chaired this year's Best Stand panel which included Florian von Hofen, chief executive of VLPT; Jerry Gilbert, editor, *Live!*; Colin Gawne, editor, *EDR*; freelance pro-audio journalist Kevin Hilton; and Ruth Rossington assistant editor, *L+S!*

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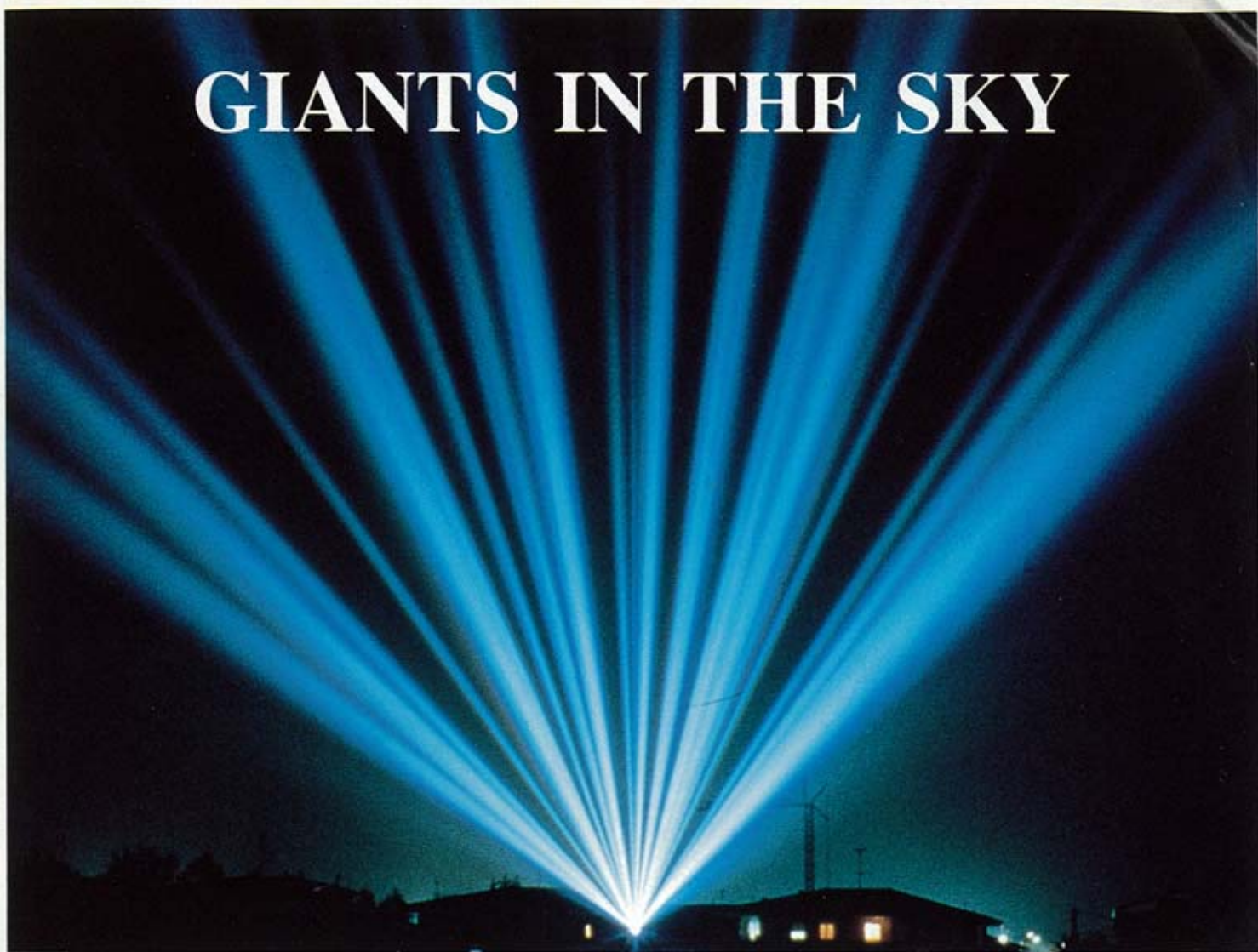
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Vari-Lite Moves

Plan to acquire V-L Europe and TP

Following the successful outcome of a legal dispute in the United States (see below), Vari-Lite Inc of Dallas have moved swiftly to consolidate their position in world markets by announcing the planned acquisition of their London-based franchisee Vari-Lite (Europe) Ltd, Brilliant Stages Ltd and the conventional lighting operations of Samuelsons Theatre and Concert Services Ltd (Theatre Projects). It is the intention of the Samuelson Group plc to retain Samuelson Communications and the sound operations of Theatre and Concert Services Ltd which will be relocated.

The negotiations are taking place against the background that Vari-Lite Europe's licence with the Texas-based manufacturer of driven luminaires is due to expire in three years time.

Unofficially, it is understood that a new management team will be established under Brian Croft with Alan Thomson, Charlie Kail, Barbara Joynson and a new financial controller, yet to be recruited. We also understand Roger Dix, managing director of The Lighting and Sound Division of the Samuelson Group, will be heading up Samuelson Communications and the sound operations of TP, and developing and expanding that area of the Samuelson business on

completion of the deal, which is scheduled for finalisation prior to the end of December. There was an embargo on comment from individuals in the Greenford offices following the announcement from Eagle Trust, which came just as we were going to press, though L+SI understand that all involved are delighted with the deal.

Speaking from his Dallas office, Rusty Brutsché, CEO of Vari-Lite Inc told L+SI: "We have been delighted with the role Samuelsons have played in the establishment of Vari-Lite in Europe; they've done a great job. So this is an excellent opportunity for us to expand our operation and it suits everyone concerned at this time. It's a good deal all round, and I'm really excited about it. I have to admit this has been a pretty good week for us."

Only recently, Vari-Lite announced a 'friendly' split with its erstwhile representative in New York and Orlando, Vanco, and the intention to establish their own offices in both locations.

The announcement of the takeover in the UK came hard on the heels of a jury decision in Texas on October 5th, rejecting a multi-million claim for damages against Showco and its spin-off the Vari-Lite company, and the original partners in both corporations. The case, which alleged stock-fraud by the defendants, was brought by representatives of Jack Calmes, now president of Syncrolite Inc and previously president of

Showco. Calmes claimed that he had been materially misled, when he sold out his shares in Showco in August 1980, following his forced departure from the company the previous March. He alleged that Brutsché and other members of the Showco board conspired to defraud him by failing to disclose the existence of the development project which created the Vari*Lite prior to the sale. The jury disagreed, but Calmes was granted the right to appeal.

Calmes told L+SI: "This case had absolutely nothing to do with Syncrolite Inc which will continue with business as usual."

In an unrelated action, as yet unresolved, Vari-Lite confirmed that they are continuing to pursue a patent infringement action against Syncrolite. When asked about that also, Calmes responded: "We shall continue to fight that one too and this time I am sure we will win."

Snips from PLASA 93

Avolites sold first of their Diamond II desks off stand to Vari-Lite Espagna . . . Strand previewed new GSX boards with, in landmark move, the software unbundled from the hardware . . . **Big step forward made in DMX512 debate with a move ensuring PLASA lead . . .** Coemar gave sneak preview of long-awaited NAT projector . . . **In second coming, Optikinetics revealed gains from the Rave scene, including supplying kit for the Orb concert in Copenhagen . . .** Official launches of LSD's Icon and Vari-Lite's VL2C . . . **Cerebrum launched 'roadworthy' version of ShowCAD . . .** Shuttlesound, Canon Audio and Martin Professional carry off prestigious PLASA trophies . . . **Vestax gave us CD-11, a new twin CD player with joystick effects control . . .** Wembley demonstrated '3D' sound . . . **RCF had flush mounting speakers . . .** Tannoy's SuperDual down throat of King Kong at Universal Studios USA . . .



The Winner from Wales

Pictured left, L+SI's John Offord pulled out the name of the winner of Cerebrum Lighting's PLASA Show competition for a ShowCAD package. Mark Tonks was the witness.

Pictured right, the software package was duly presented to Paul Adams (left) of PA Installations by John Lethbridge, Cerebrum's managing director.



Glantre on the Up Down Under

Whilst Sydney is basking in the heady glory of winning the Olympics for the year 2,000, Glantre Engineering have already made forays into this spectacular city with the announcement of their contract to provide a complete technical systems package for the reconstruction and extension of the Capitol Theatre.

The theatre was first opened in 1928 in a blaze of gilded glory, but since its closure in the early 1980s the ravages of decay have taken their toll. There are plans to add an additional foyer of 12 metres in width by using part of an adjoining building. The area below the extended stage will house dressing rooms and an orchestra pit for 100 musicians. A concrete subfloor under the stalls will render inaudible the rumble of trains that pass beneath.

Glantre have been selected as sub-contractors



Andrew Mathieson (left), Henry Lewis (centre) and Dane Cookson (right).

to Fletcher Construction Australia and will both be working in close co-operation with the theatre consultants, Entertech. Clients for the projects are property developers Ipoh Garden Developments and Sydney City Council. Glantre's sub contract (valued at £470,000) encompasses the supply and installation of 101 single purchase counterweight suspension sets, four motorized rigging sets, 24 cable reeling drums, safety curtain and motorized auditorium ceiling traps. The scope of work also comprises sound, communications, stage management systems, an extensive DMX network and houselight dimming. Glantre's principal

sub-contractors include Australian companies ITE, Creative Audio and LightMoves Technologies.

In keeping with the company's cosmopolitan work ethic, Glantre have appointed three new staff members - all of whom just happen to be of Antipodean origin. Henry Lewis has been recruited as site manager for the Capitol Theatre. He is a specialist in structural steelwork and obtained his BEng in Civil Engineering from the University of Tasmania.

Andrew Mathieson was previously with Jands and also worked for Electrosonic at Expo 92 in Seville. He joined the company as senior project engineer and is busy working on projects in the Middle East. Dane Cookson is a specialist audio engineer whose previous employers include the Broadcasting Corporation of New Zealand and UK sound contractor RG Jones. Dane's current assignment is as project engineer for the 14 sound systems for Glantre's contract for P&O's superliner, M.V. Oriana.

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Tannoy for King Kong



King Kong, six tons of growling fury awaits visitors inside Kongfrontation at Universal Studios Florida, complete with a mouthful of Tannoy Sound.

Tannoy has found the biggest-ever customer for its new SuperDual loudspeakers - Universal Studios 38 feet high King Kong monster. The deal is part of Universal's strategy of helping their visitors to enjoy total involvement in the movies by using the ultimate realism, and the SuperDual fits inside King Kong's head to become the monster's voice.

Bill Calma, vice president of TGI North America, Alex Munro, Tannoy's UK managing director and professional products manager Derek West, travelled to Universal Studios last March to demonstrate the SuperDual. The requirement was for a loudspeaker that was so compact that it would fit inside the monster's head and with wide, even dispersion with no phase errors to distract the moving audience. Power and dynamics to match Kong's size and an absolutely natural sound quality were also essential to complete the picture of reality. After successful demonstrations at Universal, Larry Howard, the chief sound engineer, was convinced that the SuperDual was the loudspeaker to provide the voice for Kong.

Showboat Pitches into the Light

Toronto sees the grand opening of its new theatre, the North York Performing Arts Centre, this month with Hal Prince's 'true epic' production of Showboat. The production, which marks Richard Pilbrow's return to lighting design, also exhibits the first-ever use of the new adaptation for DHA's existing Digital Light Curtain - the pitching yoke mechanism which, when attached to a conventional Digital Light Curtain, enables the unit to move with both a tilting and a see-saw (pitching) motion. (The new system won a commendation in this year's PLASA Show Best Product Award - see News this issue).

Ten of these pitching units, designed for Richard Pilbrow with this particular production in mind, were installed in early September and form the key element of the lighting plan. The units retain their ability to be individually-controlled and directed, whilst the pitching movement is extremely smooth with a high degree of accuracy and repeatability. As with the tilt mechanism in the standard Digital Light Curtain, the pitch is specified to 1/10deg with ± 30 deg pitch from side to side. Even at slow speeds, the fluidity of movement is maintained making it ideal for gradual changes in the mood of the lighting over periods of 10 or 20 minutes. Pitch, tilt and colour can be changed over a timespan of anything up to one hour in duration.

For Showboat, the pitching Light Curtains are rigged in high positions, their narrow design ensuring that they fit snugly between the scenery and lighting bars with no restriction imposed on any of their functions. They give a broad coverage of strongly directional light, the orientation of which can be finely controlled over a wide area. "They are sensational," said Richard Pilbrow. "For the first time I can have a moving light which is not a single cone shape but a complete wall of even light."

Since Eugene Lee's three-dimensional sets call for naturalistic lighting, Richard wanted to evoke a realistic, rather than theatrical looking light. The subtlety of the pitching Light Curtains enabled him to do this, creating the effect of 'the sun moving across the firmament'. "I'm thrilled," he said. "It is a moving light which doesn't look like a moving light."

The pitching mechanism, like the conventional Light Curtains, is driven by DHA's Light Moves software, which the operator was able to familiarise himself with, in advance of the arrival of the Light Curtains themselves, by learning in his hotel room on his AppleMac laptop computer. The AppleMac used in the show acts as slave to the main Strand Lightpalette 90 lighting desk. Thus, with the exception of the Vari*Lite's, all the lighting is easily controlled by one operator.

The status report provided by the Light Moves interface proves invaluable since from his position in a gallery stage left, the operator has virtually no visual contact with the units (or any of the rest of the rig). He is nevertheless able to keep tabs on the movements and changes of the Light Curtains' positions and colours purely on the information fed back to him over the Light Talk control network.

Showboat opens at the North York Performing Arts Centre this month and it is hoped that the production will transfer to Broadway and London sometime in the near future.



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Often imitated – never equalled



Osram at Euro Disney

Festival Disney, the evening entertainment centre situated at the Paris-based Euro Disney, achieves its 'ceiling of light' with the patented Lumisphere low voltage lighting system. There are approximately 6,000 metres of festoon lighting and some 5,000 Lumisphere light units, incorporating 5W low voltage tungsten halogen lamps which have been specially modified by Lumisphere.

Designed by California architect, Frank Gehry, Festival Disney houses a range of American-themed shops, restaurants and nightclubs. It is dominated by glittering 20-metre high reflective aluminium pylons which support a grid of the tiny Lumisphere Light Units creating the stunning 'stars' effect.

Cue-ing Up

Cue Pro Audio Services, the flying audio repair team based in Islington, have landed no less than four important service contracts for major London venues since their formation in April.

Clubs that can relax in the knowledge that they are safe in the hands of Cue's audio 'doctors' include the Forum, the Grand, the Ministry of Sound and the Garage. Cue have also recently undertaken work at Milo Music, and the prestigious Protocol Studios, as well as at the Marquee Club.

VL5s into play for Shakespeare

The brief for the lighting for the Cheltenham Everyman Theatre's new production of Romeo and Juliet, due to run from the 28th October - 20th November, was to provide an 'urban feel' combined with a fluid design to allow the play to move very quickly on the stage through its many scenes.

Lighting designer Nick Hunt has chosen to use five Vari*Lite VL5s together with a variety of discharge sources, to give a strong 'artificial light' look to the production. He told L+S: "Another practical benefit of using the VL5s is to overcome the problems caused by Romeo and Juliet sharing a common set with two other productions during the Everyman's autumn season, which means that re-rigging and re-focusing between productions is limited."

Starstruck and Dare at Rosies

Starstruck, one of Scotland's leading installation companies, has installed its first Dare professional audio package at Rosie O'Grady's night spot in Falkirk. The equipment consists of four NX10 mid/top speakers, four DR14 bass cabinets and an SC2 system controller. Other equipment includes amplifiers from Amcron, with Rane providing the processing and a Formula Sound PM90 mixer completing the package.

New operations manager at Starstruck is Robert Adam who joined the company in June.

1994 Lighting Design Awards

After the successful launch last year of the new lighting awards scheme, the Lighting Design Awards 1993, the Lighting Industry Federation is inviting submissions for this year's competition - The Lighting Design Awards 1994.

The Lighting Design Awards aim to provide a showcase for the very best of UK lighting, and exemplify the design and energy management skills of the building design teams who have made such a significant contribution to the lit environment.

The competition is simply named to achieve a simple purpose - to promote excellence and innovation in all aspects of lighting design. The sponsors of the competition no longer find it necessary to run two competitions, or to consider and promote energy efficiency as separate from the principles of good lighting design.

The Lighting Industry Federation believes that these lighting awards span a breadth of lighting design and application which has not previously been considered in one national lighting awards scheme. In the new competition last year, for instance, well-known theatre lighting designer Mark Henderson won a Highly Commended Award for the lighting of a permanent display in the Leisure Category and anyone who was at the awards ceremony at the Savoy earlier this year would surely agree that the inclusion of such an innovative and imaginative scheme lifted the whole presentation to a more exciting level.

The Awards have gained the support of just about every organisation associated with lighting in the UK, and sponsors include CIBS, NIC, IALD, RIBA, CBI, TUC and numerous lighting and electrical associations (including PLASA).

The closing date for entries is December 13th, and entry forms and further information can be obtained from: The Secretary, The Lighting Design Awards, Swan House, 207 Balham High Road, London SW17 7BQ.

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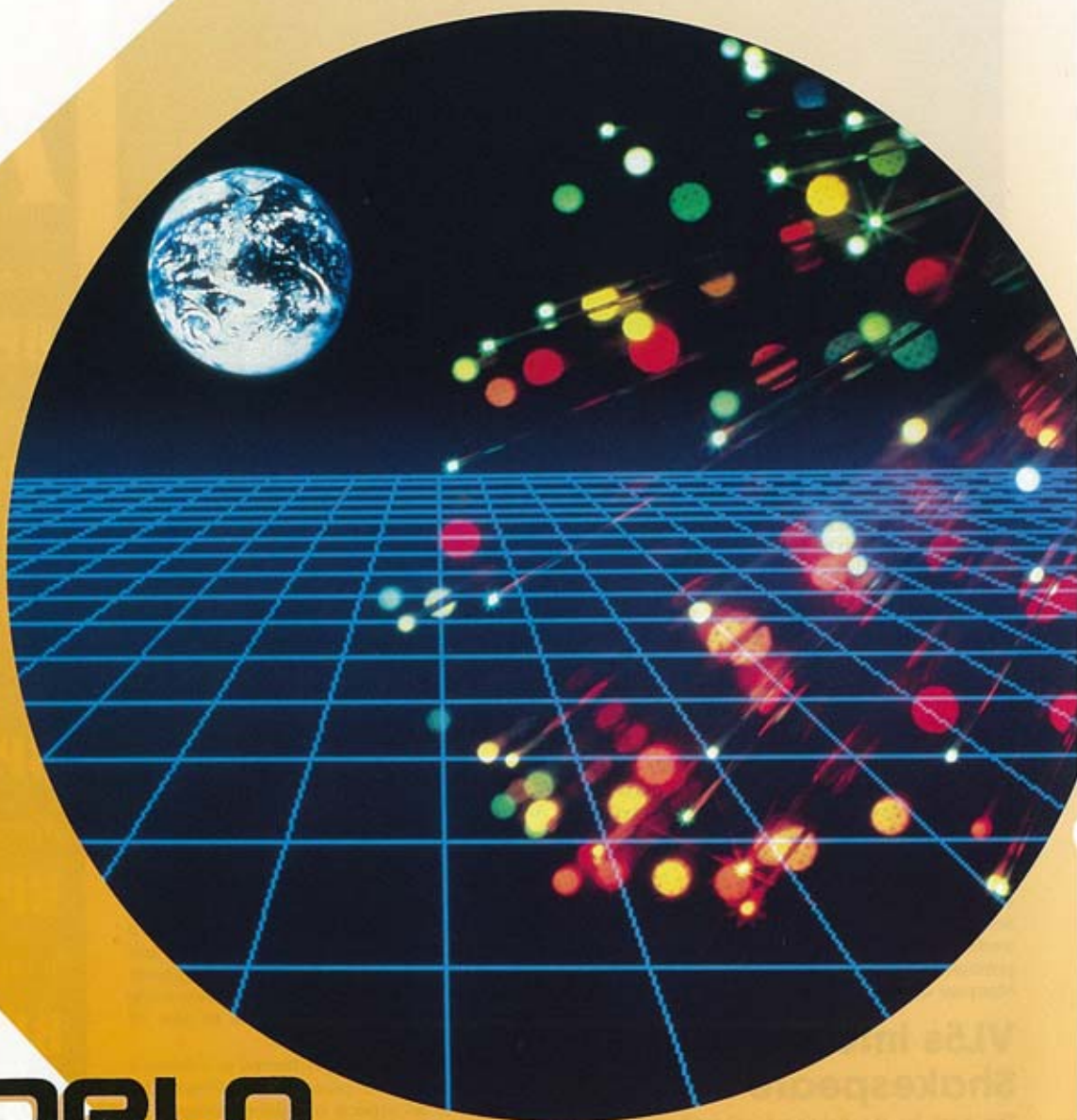
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JEM and Zooropa

Specially modified JEM 4-channel and 24-channel Stage FX Controllers were used by Shell Shock Firework Company on the recent U2 'Zooropa' tour. JEM had just seven days to make the modifications before the first concert in Rotterdam, back in May of this year. "The Stage FX Controllers were originally designed for theatre use and so a degree of 'beefing up' was required before we could let them loose on the tour," Jon Petts of JEM told L+S. "These modifications are now standard features on all our new controllers."

Another consideration was the length of cable-runs required. "These were not simply from the main control area to the stage, but also up the PA towers and up to the top of four of 30 metre TV masts," explained Petts. "A total of 70 x 20 second white smoke cartridges were fired from these areas." Part of the set incorporated two specially designed 'bins' in diagonally opposite corners. Each of these was fitted with five JEM twin-firing pods and effects were fired through grilles. The loading quantity of red and yellow coloured smoke varied, depending on the weather conditions on the night. The effect was varied further with the addition of red coloured flash and giant silver burst cartridges.

A pyro highlight during the shows was the firing of six confetti cannons (specials designed by Shell Shock Firework Company) which were loaded with a few thousand Zoo Ecu banknotes. For the Cork and Dublin concerts the loading was changed to 20,000 Zooropa condoms!

To avoid complications at border crossings, the pyrotechnics were not trucked around with the rest of the gear - instead JEM air-freighted designated quantities of cartridges to each country on the tour. This was made easier because of the importing and licensing network which JEM and Shell Shock have developed over the years. Each importer also arranged venue licensing, as well as supplying a recognised licensed pyrotechnic operator to oversee the concert.

The technician for the entire tour was 'pyro master' Shaun O'Shaughnessy. "The JEM Cartridges fired really well with less than 1% failure, while the hardware only needed slight 'patching-up' from time to time," he reported. The JEM/Shell Shock collaboration continues with the recent confirmation of the Far Eastern leg of the U2 tour.

Meyer Sound for Bourla

Antwerp's celebrated Bourla Theatre, which recently re-opened after a 13 year refurbishment - has a comprehensive Meyer Sound system comprising a total of 55 units. It took no less than three years to design and install.

The main stage system involves a combination of the compact UPA-1C UltraSeries bi-amplified loudspeakers and the USW-1 UltraSeries subwoofers, with the appropriate control electronics units. Monitoring is provided by UM-1B UltraMonitors and the wide 70° coverage USM-1 units. In addition, parametric equalisation is handled by four CP-10 units, incorporating Meyer Sound's unique complementary phase circuitry.

Central to the Bourla's system is the ability to reconfigure the whole theatre system extremely quickly, thanks to a comprehensive input/output and loudspeaker patch system. Any of the speakers, positioned on any of the theatre's seven levels can be configured for effects or other uses.

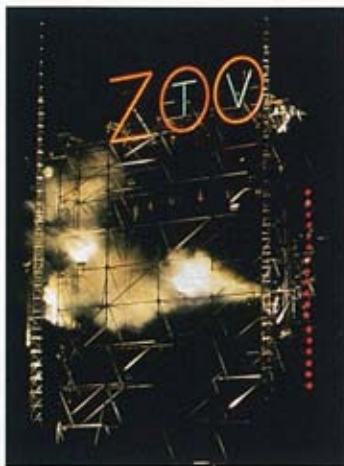
The Trans European Music (TEM) team, the local Meyer distributor, worked closely with the theatre's sound department, with the brief involving a package capable of handling mainstream musical and voice productions. Raf Lenssens and Stephen Hessens were responsible for the system design, with Jean Marie Lanove providing technical follow-up and installation. Technical co-ordinator at Bourla Theatre is Mon de Leenheir.

Lightfactor Positive

Lightfactor Sales have reported highly positive results from the recent PLASA show. Business was brisk on their prime position stand at the front of the hall and High End Systems' range of products was given maximum exposure. Orders for Trackspots in particular far outstripped expectations. The well-established Intellabeam continued to interest an ever-widening audience, and the new High End products - the Intellabeam FX package and the Universal controller - have now become accepted as a fundamental part of this quality range of lighting equipment, say Lightfactor.

Just across the road, at the Park Inn Hotel, High End extended their hospitality to visitors, who were also treated to the visual delight of the products on show, in a spectacular ételage programmed by Tim Grivas.

High End President Bob Schacherl commented that PLASA '93 has been the most successful European Trade show in which they have ever partaken, and Lightfactor's Mick Hannaford told L+S: "It's been phenomenal - we are looking forward to the next 12 months being busy and active, and have already re-booked the same space for next year's show."



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More Flashlight Expansion



Flashlight's new sales building.

Since our last report on Flashlight of Utrecht (News, February) the company has expanded widely on several fronts, and a total of almost 9,000 square metres is now used by the various divisions of the operation. Former owner of the company Gerard Jongerius is managing director of the group, which is now controlled by NOB, the Netherlands Broadcasting Corporation.

The huge new building incorporating the hire and service operation runs to a massive 3,400sq.m whilst the Studios, where the complete operation used to be housed, account for 2,400sq.m. The new showroom and sales building covers 1,400sq.m and the scenery construction area takes 1,400sq.m of the studio building.

In addition, Production Factory is a separate company jointly owned by Flashlight, Stage Co of Belgium, Ampco, Production Design and Mick Froeling, who also manages the operation. It enables companies to co-ordinate productions and sub-divide the work, providing everything from transport and services to event organisation.

The mix of facilities at the command of the group is impressive and equipment added to stock in 1992 alone totalled £750,000, largely in control, dimmers and luminaires. "Our stock is extremely comprehensive," Gerard Jongerius told L+SI, "and we are about to add intelligent projectors to our inventory."

"We also want to tell the world that to make things easier for our customers we will be opening the rental operation 24 hours a day, every day, as from November. The technical department will also expand its opening hours, staying open until



Part of the test/service facility.

11 pm and during the week-end. Sales operation hours will also be extended to match.

"This will mean that customers from, say, Amsterdam can bring equipment back during the night. I am hoping this will make us even more successful, and you must also bear in mind that we are only two hours away from Cologne and Brussels. We will commence this expanded service for a six month trial period and then take a look at how it has worked. If necessary we will adjust things accordingly."

And to widen their market ever-further, Flashlight have already opened a small rental house near Cologne, specifically for broadcast equipment. Moves into other adjacent countries are at an advanced stage. "We believe in providing a quality service at a good price," said Jongerius. "We've made many good friends and now we can give our customers more and more."



A production in rehearsal at Central Studios.

ABTT Awareness Day

The ABTT is organising an 'Awareness Day' for members of the ABTT, SWET, TMA, BECTU, SBTU and interested parties, to take place on Tuesday 16th November at the Duke of Yorks Theatre in St. Martin's Lane, London.

Proceedings will kick off at 2.00pm with a presentation by Health & Safety inspectors on the 'COSHH Regulations' which came into force in October 1988 and which affect all employees, HODs and theatre managers. At 3.30pm, John Faulkner will chair a seminar on 'COSHH in Practice' which will assess how the procedures have affected the situation in theatres, highlighting some of the problems and successes associated with the regulations. The final talk of the day, starting at 4.30pm, will take the form of a summary and overview to be presented by Chris March, senior lecturer in construction management at the University of Salford. Anyone is welcome to attend.

For further details, contact Ethel Langstreth at the ABTT, telephone 071-403 3778.

PSE appoints New Distribution

Following Production Services Europe Ltd successful UK launch of their Laboratory Series loudspeakers earlier this year, Leicester dealer Midland Musical Services has been appointed as exclusive distributor for all regions north of Watford. MMS has just completed the first UK installation of a PSE sound system. The contract for Lab Series 5 cabinets and sub-bass was carried out at the Complex night club in Leicester.

Icons at the Theatre



Light & Sound Design's new Icon moving light, officially launched at the PLASA Show, has been utilized by lighting director Benny Ball in the stage show 'Bertie' starring Anita Harris and Ron Moody at the Alexandra Theatre, Birmingham. The project, handled by Peter Travena of LSD's new special projects department has 16 of the company's new flagship and is scheduled to run for 12 weeks. Paul Sharman, production electrician at the Alexandra Theatre, had several reservations about using LSD for a major new musical. "In reality I need not have worried," Paul told L+SI. "A 350-lamp rig and all the peripherals were supplied in under a week from receiving the specification to load in. In short, the service could not be faulted."

Lighting director Benny Ball added: "I found the Icons a really useful and hardworking tool, capable of all I've asked of the units so far. The accuracy is superb and playback just as plotted. The focus range for the theatre is just awesome with great flexibility in size and softness coupled with a colour palette capable of creating the ranges any theatre LD would be proud of. Gobos are a dream, a great standard range, well thought out and very easy to change to personal selection. The control is very friendly, very flexible and easy to use (even by a novice) - so no 'moving light' mystery here!"

Peter Travena told us that although the timescale from plot to rig was short, he felt the combination of Paul Sharman (chief electrician) and his team's flexibility, Benny Ball's open-mindedness and LSD's large resources made an impossible task simple and has resulted in a stage show that has a terrific look.

Missing from PLASA Get-In

Paul Butler's rigging bag which included a Commando knife, six carabineers, marked with green and yellow tape, assorted strops/spansets/bulldogs, Maglite holder and steel wire safeties. Reward offered for recovery. Please contact (0604) 790900.



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Grand Master 100z Memory left: 81z Sub Page 1

Cur List	Up	Down	Wait	Link	Follow	Label	Submaster List	Sub #	Label
95	EF	2	3.5	B	15		1	FL	
97	EF	2	1.5	D	Hold		2	FL	
99	EF	2	3	D	13		3	FL	
99			5				4	FL	
100			0				5	FL	
101			0				6	FL	
102			Subroutine				7	FL	
103			Subroutine				8	FL	
105			Subroutine				9	FL	
108			2				10	42	
151			1				11	58	
152			Subroutine				12	83	
200	EF	0	0	D	Hold		13	FL	
250			5				14		
400			5				15		
450	EF	5		D	Hold		16		
550			5				17		
556	EF	0	0	D	Hold		18		
700			5				19		

Folder A/B	Cur	2	Folder C/D	Cur	55
100z	Complete	100z	Effect	Rate	56

1051:	1066:	1071:	1076:	1081:	1086:	1091:	1096:	1101:	1106:
1052:	1067:	1072:	1077:	1082:	1087:	1092:	1097:	1102:	1107:
1053:	1068:	1073:	1078:	1083:	1088:	1093:	1098:	1103:	1108:
1054:	1069:	1074:	1079:	1084:	1089:	1094:	1099:	1104:	1109:
1055:	1070:	1075:	1080:	1085:	1090:	1095:	1100:	1105:	1110:
1056:	1071:	1076:	1081:	1086:	1091:	1096:	1101:	1106:	1111:
1057:	1072:	1077:	1082:	1087:	1092:	1097:	1102:	1107:	1112:
1058:	1073:	1078:	1083:	1088:	1093:	1098:	1103:	1108:	1113:
1059:	1074:	1079:	1084:	1089:	1094:	1099:	1104:	1109:	1114:
1060:	1075:	1080:	1085:	1090:	1095:	1100:	1105:	1110:	1115:
1061:	1076:	1081:	1086:	1091:	1096:	1101:	1106:	1111:	1116:
1062:	1077:	1082:	1087:	1092:	1097:	1102:	1107:	1112:	1117:
1063:	1078:	1083:	1088:	1093:	1098:	1103:	1108:	1113:	1118:
1064:	1079:	1084:	1089:	1094:	1099:	1104:	1109:	1114:	1119:
1065:	1080:	1085:	1090:	1095:	1100:	1105:	1110:	1115:	1120:

Select channel numbers

Cur/Type	Up	Down	Wait	Link	Follow	Label
95	EF	2	3.5	B	15	

S1 S2 S3 S4 S5 S6 S7 S8

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Light Engineering PLASA Plus



During the Earls Court 2 PLASA Show, Light Engineering set up their stall at 'The Tournament', a couple of hundred yards away. They even hired a London bus to keep their customers dry during the short journey! The company's managing director Cliff Wilding told L+SI. "This year I wanted to meet our customers in a relaxed atmosphere and make them aware of how much our product range has grown over the past three years. We enquired about doing this within the main body of the show, but the facilities couldn't be provided so we had little option but to look outside. I was a little taken aback by the reaction by some people to what we had done, although I took it as the ultimate compliment that some saw our PLASApus as being competition for the main event! Perhaps we were a little cheeky in using the name, but as members of the Association I felt it was incumbent on us to fly the flag."

New effects products shown included 'Doris' (you'll have to ring up the company to get the history on how it got its name) and 'Twinkle Globes'. The latter are low voltage decorative lamps to complement the existing Tubelight range. There were also new products from SGM, Sound Engineering's new range of slave amplifiers, additions to the UV Glowline range and early announcement of the Stomper MkII band lighting controller. Big Screen TV was also in attendance.

People News

Colin Jones, whose name has been synonymous with Chameleon Lighting for 20 years, is now working as an independent lighting designer. Following the sale of the assets of Chameleon to Meteorlites last October, he has been working as a production manager in their Borehamwood premises as part of the sale contract. As the term of that contract is now completed, Colin told L+SI that it will be most refreshing to deal only with the design and artistic end of shows in the future, without the burden of a lighting hire business attached.

Lite Structures have appointed **Larry Dane** as their UK sales manager. Asked to comment on the extra skills and industry experience brought to the company by their latest recruit, partners Graham Thomas and Adrian Brooks pronounced themselves 'as happy as Larry'.

TMB Associates of California has hired **Jaime Duarte** as its export sales manager. Duarte was formerly general manager for Professional Design Products, and will be co-ordinating the company's growing export sales into Latin America, the Pacific Rim and Europe as well as assisting with TMB's US sales of professional studio, touring and power distribution equipment.

Guy Lewis has joined the Tannoy export sales team from Teac/Tascam. He began his career in pro audio at Teac/Tascam in 1989, initially as sales and marketing assistant. During his four years there he progressed through the ranks to become European sales co-ordinator. Lewis will be working closely with Tannoy's existing distributors in Scandinavia, Southern Europe and the Middle East.

AMS Neve has appointed **David Sim** to the new position of head of sales, reporting directly to Frank Massam, director of sales and marketing. Formerly sales manager for Asia and Australia, Sim will now take overall responsibility for world-wide sales, co-ordinating the activities of the international sales network of AMS Neve personnel and distributors.

Sony Broadcast & Professional UK has appointed **Jane Ashton** as general manager of marketing.

Bumper Show for NJD

With business already up to unheard-of levels pre-PLASA Show, Kevin Hopcroft of NJD Electronics reported batch after batch of good news post-Earls Court.

Two new dealers, for Finland and Portugal, were set up and first orders were received from the company's new Danish distributors. From Hong Kong, a further two new dealers placed major orders for equipment that is destined for mainland China. NJD, in what Hopcroft describes will be a "bumper year", have just had the added boost of Nemko certification for the Scandinavian countries. Orders on-stand from all their regular outlets where "hot and strong" and Kevin was particularly surprised at the level of interest and orders for their new 'Merlin' control desk (see L+SI September).

To cope with the extra work-load, John Dolby has been appointed as NJD's sales manager for the UK, freeing up Keith Greenwood to concentrate on the ever-increasing export load.



Kevin Hopcroft introduces NJD's latest products.

Back into Action



Matthew Griffiths (seated left) of TSL (AV) and treasurer of PLASA, is welcomed to the Light & Sound Show by John Simpson (right) and Bryan Raven of White Light. Matthew has suffered a long and serious illness but we are happy to report that he is improving daily, and now getting out of his wheelchair and onto crutches. It won't be long before his renowned wit will be a regular feature of PLASA EC meetings again.

Magnum Winners

On each day of the PLASA Show, M & M Camelont organised a prize draw on their stand for a Magnum of Moët & Chandon champagne. The lucky winners were Pauline Goldworthy of the Brewhouse Theatre & Arts Centre, Andrew Ruegg of Taunton, T Michalak of London and Matthew Tonks of Glantre Engineering. Any of these are welcome to visit the offices of L+SI at anytime, provided they bring their own refreshments.

Mark your Polo

Following our news piece last month about L+SI's new Polo Shirts, we were overwhelmed by the level of interest at the PLASA Show and came back to Eastbourne with empty boxes. If you would like to get your hands on one of these desirable fashions items, get your marker on it now by telephoning (0323) 642639. We have just re-ordered and new supplies will be available shortly. The shirts come in three sizes - M, L and XL and cost £10.95. Alternatively, you can take out a subscription to L+SI and get one free! Next outing for the shirts is LDI in Orlando, so get saving those pennies.

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Rocky Horror USA and White Light

The famous Rocky Horror Picture Show, which has had links with White Light for 20 years, has now followed the company to America. When the cult show opened in the King's Road Theatre in the early seventies, White Light's founder John Simpson started his business hiring out lighting equipment from the theatre basement. In fact, certain parts of the original set are still used today as work benches in White Light's Filmer Road base! Obviously the show will be using a completely new set when it opens in Minneapolis on October 10th, over 20 years since it first opened in London.

White Light USA, formed in 1991 and based in New Jersey, is managed by John Simpson's brother Peter. The American operation co-ordinates the import and sales of White Light's VFX optical effects systems and Modelbox software. Peter Simpson is also involved in sourcing the large quantity of American equipment that White Light has introduced to London for the recent spate of Broadway shows which have transferred to London's West End.

Soundcraft Debut

Soundcraft's stand at AES New York this month features not only new products, but also new technology on their ground-breaking DC 2000. Whilst Vienna II, an updated version of the successful Vienna front-of-house console, and the all new SN16 monitor desk are both sure to attract attention, it is the moving faders and price tag of the DC 2000 that will be of interest, say the company.

Other new products on show include Sapphire LC, the LM1 location mixer, and the latest additions to the Spirit Folio family: Folio 4 and Folio Si. Also present will be Europa, Delta Theatre, and Venue consoles.

Same Again Please!



Martin Professional's Peter Johansen (left) signs up for the same site at the 1994 PLASA Light and Sound Show. The picture was taken in the award-winning stand's VIP suite. Recipient of the contract is show manager James Brooks-Ward of Philbeach Events.

MSL Connection

During September the partnership of Ashley Lewis and David Smith, who formerly traded as The Connection, acquired control of North London distributors MSL Pro Light and Sound Ltd. Lewis, who until recently held the position of sales director with the company, concluded the handover with former managing director and majority shareholder Martin Prescott.

According to a press release to L+SI, the deal, which involves a substantial injection of equity capital and the transfer of shares for an undisclosed sum, will bring the club installation and support skills of Smith and the sales experience of Lewis to MSL's established UK and overseas markets.

The new operation will continue to trade from MSL's existing base and will be known as MSL Connection Ltd.

LRI Madison

Leisure Resources International (LRI) have been selected for the complete light sound and video renovation for Madisons Nightclub in Jersey. The project, due for completion at the end of October 1993 will give LRI the opportunity to once again work with John Breley Design Associates.

LRI have also been busy on other fronts (see story below), and recently completed the light, sound and video installation for Juliana's Leisure Group in the Champion Sports Bar which is situated in the Marriot Hotel in Dubai.

They have also been contracted by Juliana's for the design and installation of a night club and six karaoke rooms in Kota Kinabalu, Malaysia. This project is being executed for Shangri La Hotels and is due for completion on the 12th December this year.

Marquee to Tunisia

Marquee Audio was chosen by Leisure Resources International (LRI) to supply the sound system for Nirvana, the new European style dance club recently opened in Tunisia. Located in the emerging tourist mecca of Hammamet on the Mediterranean coast, Nirvana is the first club outside Tunisia specifically designed to appeal to European holiday makers.

The designer, Layton Reid has combined the best of local Arab craftsmanship with sophisticated styling to create a dramatic ambience that capitalises on the indigenous culture while giving travellers abroad the up-front type of club they flock to at home.

The sound system comprises JBL components, C-Audio SR606 and 707 amplifiers and includes BSS Audio FDS-360 crossovers, Technics turntables and Denon DN-2000F twin CD players and cassette decks. To meet a tight opening deadline, Marquee's custom-engineering team pre-wired the system for quick installation and to ensure smooth operation.

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Panasonic Team-up with Audio Technica

Panasonic Business Systems has appointed Audio Technica as the main distributor for its Ramsa range of professional audio systems. Based in Leeds, Audio Technica manufactures headphones and microphones for the domestic and broadcast industry and with this appointment will, for the first time, fulfil the role of distributor for another manufacturer. Panasonic Professional Audio Systems sales manager Ian Sharpe told L+SI: "Panasonic's association with Audio Technica represents an important step for the continuing growth of markets and sales for Ramsa in the UK."

The association between the two, which took effect from 1st September, will enable Ramsa to move into market areas currently under-exploited and provide greater support to the dealer network. The complete range which complements Audio Technica's own brand, will be supported throughout the UK by a field sales team within the installation, entertainment, studio, music and AV industries - areas in which Audio Technica is already well established.

Paul Maher, sales director for the UK division of Audio Technica added: "We believe this joint venture will prove very successful and provide our dealer network and customers with a comprehensive range of high quality audio products."

Great Walls of Video

Electrosonic Inc have supplied the two largest permanently installed videowalls in the world to the spectacular new Alamodome in San Antonio, Texas. The venue's main user, the San Antonio Spurs, purchased the giant videowall systems and will put them to work when the entire 80,000 seat dome is in use. Controlled by Electrosonic Picbloc 3 digital processing, each wall consists of 100 Procube 2 rear-projection cubes, and will be suspended from the roof at opposite corners of the arena.



Successful Course

Pictured above are members of the recent British Council Theatre Lighting Design and Technology seminar which was held in the UK from the 1-14th September. Director of studies was Francis Reid, who is pictured in centre of front row, and L+SI's associate editor Tony Gottelier was one of the group of distinguished lecturers who took part in the programme. Following a visit to Edinburgh during the Festival period, the group spent the second part of their stay in London, culminating with a visit to the PLASA Light & Sound Show. In the picture right, PLASA's membership and marketing manager Anna Pillow welcomes the group at the entrance to Earls Court 2.

The full line-up for the top picture is as follows: Back row (left to right): Sally Goggin (British Council), Roslan Chin (Malaysia), Abdul Razak Abdul Rahman (Malaysia), George Tarbuck (UK), Abdullah Shukri Hj Yusoff (Malaysia), Petr Vorisek (Czech Republic), Chow Kwok Wing Eric (Hong Kong), Dawood S Al-Shumemry (Kuwait). Middle

row (left to right): Ebrahim E Al-Saleh (Kuwait), Nicholas Michaletos (South Africa), Pierre Marleau (Canada), Anders Osterberg (Sweden), Alojz Fidler (Slovenia), Priman Wai Man Lee (Hong Kong), Andreas Christodoulides (Cyprus), Dick Lindstrom (Sweden). Front row (left to right): Jean Pierre Trepanier (Canada), Abdulla M Al-Nafeesi (Kuwait), Eva Szendrenyi (Hungary), Francis Reid (director of studies), Celia Wells (Trinidad & Tobago), Kenneth Rayner (Australia), Kevin Cawley (New Zealand).



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SEMINAR TAPES

Recordings of the seminars which ran throughout the PLASA Light & Sound Show are now available from the offices of Lighting+Sound International. The full programme of seminars appears in the August and September issues of the magazine. The tapes cost £10.00 + VAT each and are available on the following seminars only:

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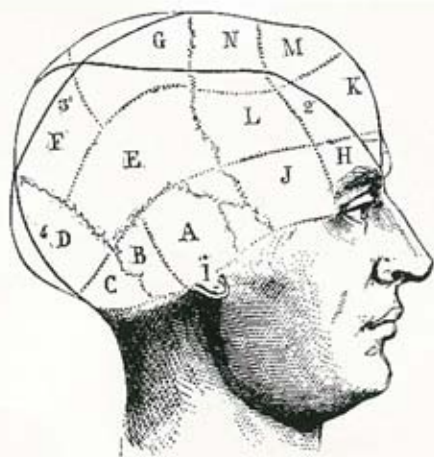
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First with Niethammer - Show deal agreed

Gradav, the North London sales and rental operation have become the first company in the UK to put Niethammer luminaires into their rental stock. Phil Wright of Gradav (pictured above with Zero 88's Paul Fowler) told L+S: "We specialise mostly in 'dry hire', in other words we supply to the trade or the end user, and we must be confident in our own minds that the product will be totally reliable. Of course we'd heard of the Niethammer range and its reputation - who hasn't in this industry - and when the opportunity arose to get them from Zero 88, we jumped at the chance." Gradav have Enizoom 1200W profiles currently available and welcome enquiries from the trade.

White Light Wins BMW

More traditionally recognised for its work with regional theatres, tours and hit West End shows, White Light is now supplying equipment for the 1993 Frankfurt Motor Show. Admitting it is 'one of the strangest jobs of the year', White Light's general manager Bryan Raven explained: "We were approached earlier this year by lighting designers Simon Tapping and Dave Bartlett to help out with the BMW stand at the show, which was designed and built by Park Avenue.

"The stand has been designed with a central feature of a covered walkway leading to a highly unusual 'dark ride' in the middle of the exhibition hall! The actual lighting supplied included a wall-mounted, custom-made distribution unit with nearly all low voltage fittings, including the ubiquitous birdy and Selecon's Accent profile." The 'dark ride' transports visitors on small cars through a series of tableaux depicting the different stages in BMW production and world-wide distributions.

M&M Camelont Communiqué

Giving themselves a 'pat on the back' at the PLASA Show, M&M Camelont issued the first edition of their 'Communiqué' newsletter. The self-congratulatory note was to remind the industry that they've completed their first five years in business. The edition announces latest updates to the Rainbow colour changers, the new M&M Gobo Maker, the Rainbow PlusCard and items on other products handled by the company, including Smoke Factory, Selecon and MA Lighting equipment. For your copy ring 071-580 6334.

Netherlands SuperDual

Tannoy Netherlands has sold 14 SuperDual loudspeakers to the De Doelen congress and concert building in Rotterdam. The venue is the second largest concert venue in the Netherlands and is one of the most prestigious congress buildings in the country.

The SuperDual sale is part of a major audio refurbishment for De Doelen. Eight CPA 10S, four 12.1 SuperDual loudspeakers and two CPA 12.3B bass enclosures will be installed in the largest hall which seats 2,350 and has over 600,000 international visitors a year. The system includes two Tannoy dedicated TX4 crossovers. The deal comes close behind the first sale of Tannoy SuperDual in continental Europe only last month. In July, Tannoy Netherlands won the contract to install SuperDuals in the new Flint Theatre in Heemstede due to open in April 1994. Tannoy officially launched the SuperDual range at the PLASA Show.

Lego Appoint Consultants

Lego World A/S has confirmed the appointment of eight consultant companies to work on the £75m development of the new Lego World, the first outside Denmark, that is scheduled to open in Windsor in 1996. Among these companies, Cincinnati-based entertainment designers Wyatt Design Associates will work together with Ideas and Imagination as visitor attraction designers. Jack Rouse Associates, also of Cincinnati, will provide operations consultation.

Cadac for Carousel

The sound design team for the recently transferred production of Carousel from the Royal National Theatre to the Shaftesbury comprises Mike Walker and Paul Grootuis, with a 65-input Cadac J-type forming the core of the system. The J-type is specified with a 12 x 24 matrix, 12 DC VCA masters and two programmable routing modules.

The show has had to undergo certain modifications for its transfer from The Lyttleton to the West End, including accommodating a 20% reduction in the overall stage size. The 30-plus cast and 27-piece orchestra however, remain unchanged from the National's previous production. The sound system is based closely on the original, utilising a combination of around 70 Tannoy, Bose, JBL and Canon loudspeakers, plus 24 Sennheiser radio microphones. Sound equipment for the show has been supplied by Theatre Projects.

New VDC Catalogue

VDC Trading Ltd have completed their new 125 page 1993 colour catalogue, providing possibly the most comprehensive collection of audio and video data and broadcast cable and connectors available. It features for the first time Cannon IDC XLRs, DDK circular multipins, Van Damme stage and wallboxes, wire management tools and a greatly expanded manufacturing section.

VDC have also been appointed dealers for ITT, Cannon, Bowthorpe Helleman and Contact. For a copy of the catalogue call 071-284 1444.

Larking for Soundtracs

Manalaty Studios in Damascus, Syria and Prima Muzik of Kuala Lumpur, Malaysia have each purchased Soundtracs Quartz 48-channel consoles fitted with Tracmix automation systems from Larking Audio Ltd, Bedford. Both were part of larger install packages.



Show Party VIPs

Pictured at the PLASA Show opening night 'Bash' at Rank Leisure's Le Palais in Hammersmith are (left to right): David Vaughan (managing director of Rank Leisure), Damian Walsh (managing director of Disco Mirror & Licensed Design), Tony Marshall (operations director of Rank Leisure and chairman of BEDA) and PLASA's chairman Tony Kingsley. The official PLASA Show party was hosted by BEDA, EDR and Disco Mirror in association with PLASA.

ARRI Spare Parts Programme

October 1st 1993 sees the start, according to ARRI, of a revolutionary concept in customer service - the ARRI Lighting Spare Parts Guarantee Programme. Under the new programme, international distributors and UK customers ordering most ARRI Lighting Spare parts from ARRI (GB) Ltd will be covered by a no-quibble delivery guarantee: "We ship to you on time, or we supply the goods free."

ARRI's marketing manager Tim Burnham told L+S: "The guarantee applies to most spare parts for current ARRI lighting and lighting control products. Two levels of service are offered, depending on the urgency of the requirement.



Tim Burnham.

We've set ourselves the target of a five working day turnaround for stand service, and two for express, though in reality the majority of express orders should get shipped the same day if we hear about it early enough. Where this starts to bite is that we've also set ourselves deadlines - if we don't ship standard orders within 15 working days, or express orders within seven, the customer gets his parts free of charge. Of course the idea is not to give away spare parts, but to dramatically improve our service," Burnham continued, "and the hope is that we can gradually ratchet the time periods down, so that eventually all spare parts shipments are more or less same day - but that's a while away. In the meantime, we're putting our money where our mouth is, and that's very important."

ARRI say they are the only professional lighting company offering such a guarantee - and it follows their recent doubling of the warranty periods on lighting and control products and the introduction of a similar guarantee on service turnaround time. Both ARRI (GB) and the ARRI Lighting factory in Germany have put in a lot of extra hours to prepare for the new system.

Edinburgh Festival Theatre

Reading-based Glantr Engineering have won a prestigious contract to provide a total package of stage rigging, lighting, sound and communications for the major development of the former Empire Theatre into the City of Edinburgh's principal performance venue. The original 1928 site of their 1,950 seat theatre has been extended to create the largest stage in Britain of any lyric touring theatre.

This important project is scheduled for completion in time for the internationally-renowned Edinburgh Arts Festival next year. Project manager Mike Rowntree and project engineer Mark Davenport from Glantr Engineering are working in co-operation on this project with management contractors Bovis Construction and Theatre Projects Consultants.

Nothing is being spared when it comes to the stage equipment for this new light in the Scottish theatrical firmament. Stage mechanical hardware includes three orchestra lifts, 84 single-purchase counterweight sets, an electrically operated lighting bridge and a loudspeaker hoist. Rear and side stage acoustic doors, safety curtain, sundry electric winches and associated equipment are also part of the stage installation. Stage and house lighting consists of 508 Strand EC90MD-Plus high specification digital dimmers with a Galaxy Nova lighting control console. In addition, custom working light control, socket boxes and a mix of luminaires from Strand and ADB are being installed.

The house sound reinforcement and effects system is based on a Soundcraft Delta DLX mixer, Crest amplifiers and a combination of loudspeakers involving Meyer, Electrovoice, JBL, Apogee and Bose products. A full communications infrastructure includes ring intercom, cue lights, MIDI control, hard of hearing systems, paging, show relay and video distribution.

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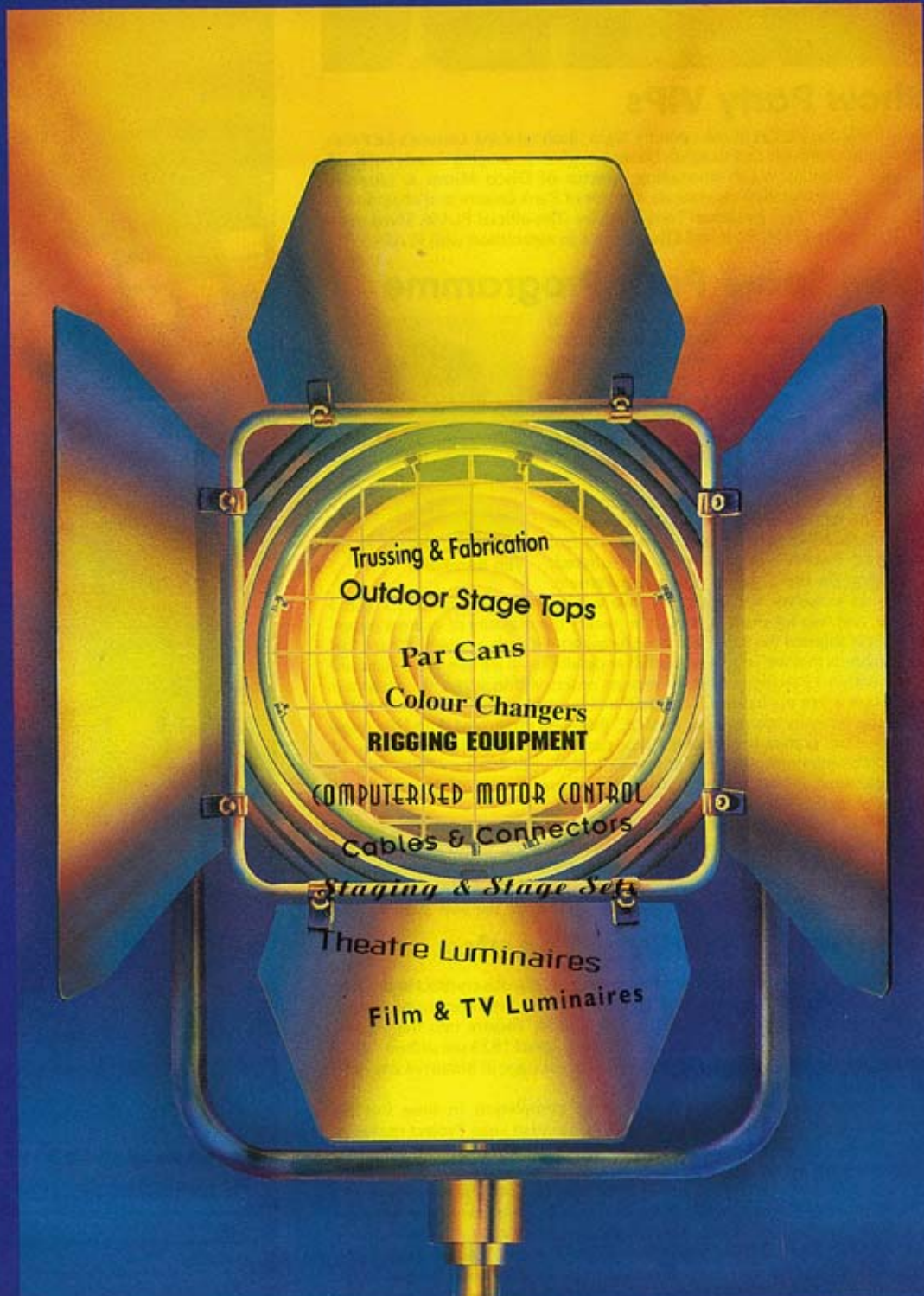


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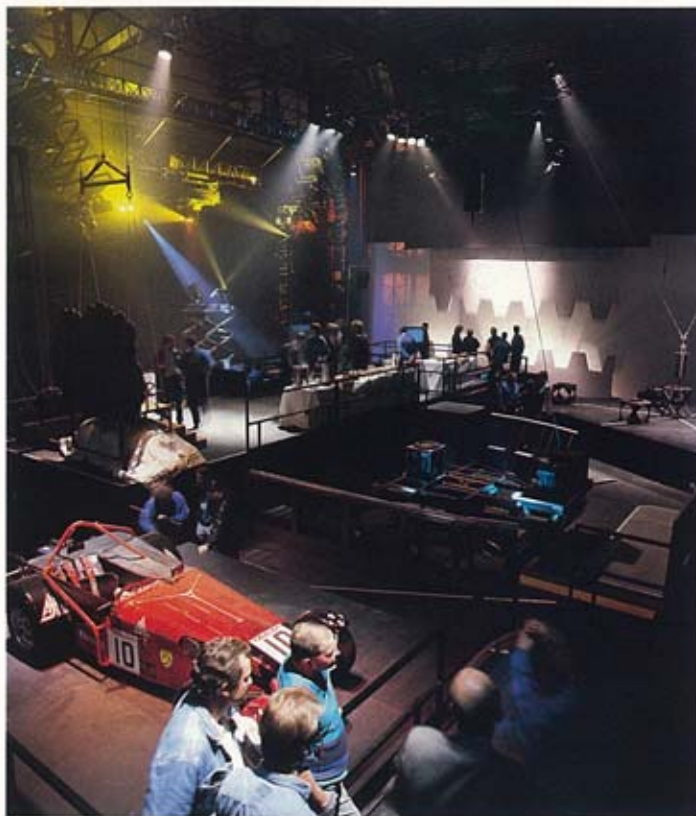
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Working round the clock for three days the individual companies, joined by the newest member of the group, Staged-Rite Ltd, designed, manufactured and erected the exhibits, whilst Staged-Rite built the viewing platforms. Theatre Projects supplied and installed the lighting, and Wigwam Acoustics supplied the sound system. The first exhibit on view - nicknamed the 'dancing hoists' - were eight Lodestars programmed by Jim Douglas' new Loadmaster system, which can drive chain-hoists individually or in groups to display intricate, ever-moving patterns. Following a succession of intriguing, perpetual-motion items involving lifting, lowering and turning, the viewer came to the star of the show - the 'Yumi' rings - named after the Japanese rock singer for whom the system was designed (see feature, June L+SI). The scheme consisted of two vertical loops of track running round the inside of truss frames. The tracks carried three self-propelled carriages or sleds. Each sled had a pod that carried four Vari*Lites, which, as well as having their own movement, could be projected up to four metres from the sled by use of pantographs or lowered to eight metres by use of wire rope winches, whether or not the sled was in motion. The Vari*Lites were programmed by Richard Knight.

Also on display were new product lines including fork-lift-proof cable crossovers and aluminium crowd barriers as seen on the Peter Gabriel tour.

Pulsar Illuminate

Jane Dorling (right) who handles all of Pulsar's publicity and PR, pictured on stand at the recent PLASA Show with sales and marketing assistant Sabrina Marengi and copies of 'Illuminate', the company's new magazine. The first issue carries a range of articles including features on the tours of Peter Gabriel and Prince, the Top of the Pops studios and the Bobby Centre and Le Palais nightclubs.

The next edition will be launched at SIB Rimini in March 1994.



Mushrooming

Mushroom Lighting have opened a new London office and installed Sue Giles as general manager. The address is Suite 329, Business Design Centre, Upper Street, Islington Green, London N1 0QH. Telephone 071-288 6010.

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Strand Man Twenty-Five Years Young

In the picture above, Strand Lighting Alan Luxford (pictured above on the right) receives his Rank Organisation 25 years' service certificate from Strand Lighting managing director Chris Waldron, at a special party held at the company's Isleworth headquarters on September 3rd.

Alan began his career at 29 King Street with Strand Electric and was interviewed for his post by the legendary Fred Bentham. He acted as assistant and had responsibility for the demonstration theatre as part of his duties. He followed this with

a period of technical study coupled with work in R&D, largely on the 700 range of luminaires. He then moved on to the quotations department, with the figure of Richard Harris then in control. By the mid-seventies he was working as a sales representative under 'Tubby' Martin, covering South East England, and was responsible for the installation of the MMS control system into Glyndebourne Opera House and numerous major projects including the Brighton Centre.

He became export sales manager in 1978



supervising business in a wide range of countries including Australia, the Comecon block and various parts of Europe. He then returned to the UK to work as major systems manager for the European Trading Division. Since the beginning of this year he has been sales manager for stage projects for the UK trading company.

When L+SI called him just prior to going to press, he was about to fly to Moscow - with a 'quick return' ticket. In our second picture, some of the party guests, including many well-known Strand Lighting faces, were momentarily distracted by John Offord's camera.

Tannoy Orlando Win

Mark Parsons, partner of Crystal Clear Audio, has won the competition for a holiday for two visiting Universal Studios in Orlando to see the latest user of Tannoy's new SuperDual loudspeaker - King Kong (see news this issue). The competition ran for the first three days of the PLASA Show and visitors to the stand were invited to answer questions on the SuperDual. The names were drawn by Tannoy MD Alex Munro on stand at midday on Tuesday.

M Roscoe, of Premier Sound & Light and Mark Adams, sales co-ordinator at RG Jones won a choice of runners-up prizes of tickets to either an Andrew Lloyd Webber musical or the RSC in the Barbican. The next 10 runners-up have the choice of a Tannoy baseball jacket or exclusive watch. They are: Mike Burt of Mike Burt Public Address, E Collings, Mike Sweetland of Mainstage, Elaine Sweetland of Williamson Park, Andy Fox of Opus Audio, Sue Fisher of Bygone Times, G Brown of Radiation Sound, Ian Caspall of Maximum Output Disco and P Martin of Club Sound & Light.

Soundcraft Show

Soundcraft has chosen the AES in New York for the 'first night' of its 21st anniversary celebrations, which will start in appropriately musical style with an organ recital given by Graham Blyth, technical guru and co-founder of the company. Graham's talents as a console designer are well-known, but few people are aware of his accomplishments as a classical organist. This concert, open to all attending the show should change this, as well as providing a restful counterpoint to the bustle of the AES. He will be playing at St Thomas's Church on Fifth Avenue on Thursday 7th October.

Outdoor Event 94

Outdoor Event and Live Music Production Exhibition, the fourth national exhibition for event organisers, will take place at the Wembley Exhibition Centre from 18-20th January, 1994. For information ring Inside Communications, telephone (0203) 694393.

NYT Electrics Course

As the summer has drawn to a close, so has the 1993 National Youth Theatre summer season, which this year saw the company's young technical teams fit-up and open four shows in the space of just three weeks.

Prior to that, all of the departments took part in a course at the NYT's north London base. The electrics course saw the 18-strong crew visiting some of the leading companies in the industry, with demonstrations at White Light, Modelbox, Vari-Lite/Theatre Projects, DHA and Imagination, backstage tours at the Royal National Theatre and Her Majesty's and talks by lighting designer Ace McCarron and sound designer John Leonard. The team also had practical lessons in rigging, focusing and lamp maintenance at the Bloomsbury and ICA theatres.

Equipment for the shows was supplied by White Light, Vari-Lite, Farrahs, Lee Filters, Akai UK and Imagination, with additional equipment provided by Theatre Projects and Gradav.

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SCIF Technical Workshops

The Sound & Communications Industries Federation (SCIF) has just completed another successful Technical Workshop in Burnham. This is the second Workshop in recent months, the earlier one taking place at Edgbaston, Birmingham, in March. The content is technical without being overly academic, and the two so far have concentrated on Loudspeaker Wiring Systems, System Fault Finding, and Connectors and Cable Terminations. Each module is demonstrated and a practical hands-on session available by all attendees bringing their own tools.

The Workshops are aimed at technicians and trainee technicians alike, providing the opportunity to further existing skills or refresh those previously learned. Further Workshops will be held around the country and anyone who wishes to participate or who has a ready-made group of engineers/technicians wishing to take advantage of these one day courses, should contact the SCIF Secretariat, without delay, to establish their requirements before the next programme is arranged. SCIF is open to requests for future subject matter and to date the following courses have been suggested: Installation of Audio Induction Loop Systems, CCTV and CD Players, Room Equalisation, Planning a System, Amplifier and System Fault Finding, BS 7443 - Sound Systems for Emergency Purposes, Loudspeaker Wiring Systems and Connectors & Cable Termination. If you would like to participate or require further information telephone SCIF on (0628) 667633 or fax (0628) 665882.

Cerebrum First



Cerebrum Lighting have announced the imminent opening of their first regional distribution depot in the UK, in conjunction with United Kingdom Distributors. Based in Leamington Spa, UKD are highly respected distributors and installers of lighting and sound equipment, and Cerebrum will be setting up a sales office at their premises, sharing warehousing, showroom, servicing and sales counter facilities.

The development will enable the two companies, in partnership, to provide a much wider range of products and services, plus faster delivery from stock and substantial savings in delivery charges to clients throughout the Midlands.

Cerebrum Lighting Ltd told L+SI that they are currently seeking an experienced technical sales person to join their team, who will be responsible for the Midlands region. For further details, please contact John Lethbridge at Cerebrum Lighting Ltd or Ian Potter at United Kingdom Distributors (tel (0926) 314878 or fax (0926) 883120). Ian Potter (left) is pictured above with John Lethbridge at the recent PLASA Light and Sound Show.

Drawmer Purchases SoundField

Following a review of its product portfolio, AMS Neve has taken the decision to focus wholly on its range of editing and mixing equipment, and has sold its SoundField and ST250 microphone business to Drawmer.



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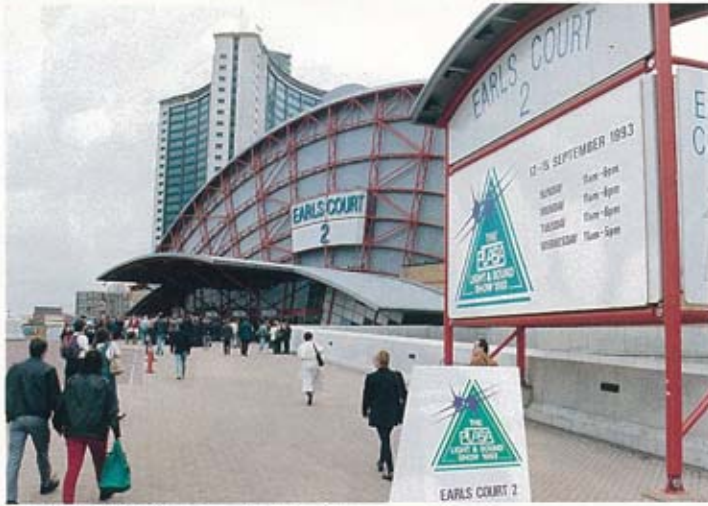


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Crowds Flock to 93 PLASA Light and Sound Show



Nearly 9,500 visitors attended the Show across four days.



The registration area, Earls Court 2.



The giant award-winning stand of Martin Professional.



Looking across the café to the double-decker stand of Lighting Technology.



The reception area of the massive Clay Paky/Pulsar complex.



Front-of-house with Lightfactor/High End stand in background.



Looking in on Coemar/Coetech.



A busy scene in the centre of Earls Court 2.

A PLETHORA FROM PLASA '93

Report and opinion, as Tony Gottelier, Robert Halliday, Simon Croft and John Offord stalk the stands at Earls Court 2

It's a bit like an annual election really isn't it? Every year the industry's manufacturers and suppliers emerge from their constituencies in Wherever-on-the-Wold and subject their products and services to the somewhat humiliating process of public scrutiny in a three day orgy of marketing, propaganda and partying. After which the whole caravan packs its bags and returns whence it came, either to count the coin, or to count the cost. Presumably, there are winners and losers, though we rarely get to hear which is which.

This time, after repeated threats during the past two years' Shows that green shoots were just below the surface, they finally broke cover at Earls Court 2 in 1993. Indeed, if some were to be believed, they headed trifold like for the ceiling. (Shh, keep it to yourself, but some even told me that they took cash!) So, hopefully, this time there were no losers.

Seriously, I have yet to meet an exhibitor this year who reported a disappointing Show. Numbers were up on all fronts: more exhibitors (up 15%), more visitors (up 15% also) and, by the sound of it, more business done by all; immeasurable in real terms, but more confidence all round. I suppose the most lasting visual memory, which conjures up for me the undoubted success of this year's event, was the seemingly endless daily queue to attend the light show at the **Martin Professional** stand. Explicable on the Sunday, but completely out of order on any other day! How they engineered that one I shall never know.

Of course, as we are always told at every Show, there was nothing new. OK, maybe nothing so radical as to make the hairs on the back of your neck stand on end, but new things there were, and in these next few pages L+SI will contrive to bring you all the bits you may have missed; in the meantime, just a couple of items to whet the appetite which I thought were particularly significant for their future impact, even if not quite honed to the point where they will set the world on fire right now.

Strand's preview of their new GSX console, set for launch at LDI, got me going since it seemed to confirm the inevitable in lighting control, forecast by myself and others over several years past. And Strand have confronted the issue in a pragmatic way. Acknowledging the fact that all desks these



The award-winning Martin stand drew long queues for its stunning lightshow.

days are basically a computer inside a box with faders, what they have done is to un-bundle the software from the hardware. In this way you can buy a simple desk and a separate range of software implementations which allow for future expansion. I can see this being very popular in the small theatre market, schools etc. Though I have some doubts about this particular implementation of the concept, especially on the commercial front, I am sure we are looking at one aspect of what the future has in store in control. I congratulate Dave Bertenshaw, Peter Ed and all at Strand on their bold strategy, which has not only given us this new control approach but also the accompanying LD90 packaged dimmer which also has a lot going for it.

The other, in which I have to declare an interest since my design practice had a hand in the original design for the head, was the appearance, atop a

retired London omnibus, of the prototype of **Coemar's** NAT 2500TM automated luminaire which has been three long years in the making. What I feel is significant, quite aside from the numerous facilities on board the lantern, is that this is a grown-up driven mirror system, offering all the positional advantages of a driven yoke system, but with none of the limitations or aberrant disadvantages previously associated with 'waggles'. Based on the periscope principle, it offers 360 degree omni-directional positioning and it is presently sitting on a very serious lamp (2500 MSR) with an equally man-sized 150mm diameter lens. 14 units are currently out on an extensive 55 date 'test' world tour with Italian Rock star Eros Ramazzotti, in which **Unusual Automation** and **Brilliant Stages** are also very involved. Again, the system will be officially launched at LDI, and presumably not hidden



The Coemar/Coe-tech combo.



Clay Paky/Pulsar: first PLASA lightshow with Golden Scan 3.



Paul Edwards demonstrates Seefactor's Light Coordinator.



Avalites' new Diamond II console.

away as at this Show. I look forward to the head unit becoming available as an attachment for standard luminaires and I want you all to buy lots of them to get the royalties rolling in!

Of course, on the automated luminaire front the launch of **LSD's** Icon will also have a significant impact on the rental market, but in view of previous extensive coverage I refrain from repetition. Nevertheless, their open stand clearly caught the eye of many. **Vari-Lite** responded with the VL2C which, though again covered by us in the September 'Sunset' feature (you read it all first here folks!), offers the identical light source. So they're slugging it out in the market place and that is how it should be.

The 'serious' mirror people were also doing battle all in a row at the back of the hall, with the first British outing of the **Clay Paky** Golden Scan 3 on **Pulsar's** stand, and the much improved, modular and 'road-ready' **Martin Professional** Pro 1220 also making its first significant appearance in their blockbuster light show. While **Coe-Tech** relied on the **Coemar** Samurai for the time being, **High End Systems** introduced up-upgrades to **Intellabeam** and **Trackspot**, pending the launch of a 'radical new device' at LDI. Little is known about this product, as it is strictly under wraps at present, apart from the proposed name which is **Cybalite**. Though I can't vouch that they will spell it that way. **Trackspot** has had its light output breathed on without changing the lamp, and, in a similar move to modularity as **Martin's** 1220, **Intellabeam** now has a retro-fitting effects module which incorporates colour mixing, frost, de-focus and a prism into the optical system.

I was also interested to see that one of the Italian 'scanners' picked out by us at Rimini, the **Studio Due** Stratos, found a home, and considerable interest by all accounts, on the **Avitec** stand.

Again on automated luminaires, the seminar on this subject 'Automated Luminaires - Where to

Now', produced plenty of fireworks. **Jim Douglas** of **Unusual Automation** struggled with the available technology to give an impression of what can be achieved by moving, moving lights three dimensionally over a stage (and offered live demonstrations which, in view of the size of the gear, were held at nearby **Black Island Studios**); **Kent Flood** boss of **AVAB**, who was provided with a runner in view of a heavy cold, gave us the ins and outs, or rather the pans and tilts, of his ambitious **Auto-Focus** system which is already finding favour in opera houses (and who later showed me his flight-deck **Super Viking** control console which, using numerous processors, provides a bewildering level of control and total flexibility of operation); and **Daniele Canuti**, of innovative Italian manufacturer **FLY**, delivered the scripted version of his vision of the future (their products, shown on **Nu-Light's** stand, include four models in their premier **FOS** range which had a long list of advanced features, including two which offer colour temperature correction between 3200K and 5600K, a facility which seemed to prove popular in later discussion. They also manufacture a number of lower level effect lighting units); but first, star turn lighting designer **Andrew Bridge** hit the button with his typically forthright views on what is needed in automation to improve his life.

In summary, his wish list amounted to less complication all round, in the lanterns and especially in the control and programming, though genuine dial-a-colour and a tracking monitor was still a want (and presumably on **DMX**, or some other acceptable common protocol to provide universal control access). He would prefer to be able to move standard lanterns such as **Par Cans**, profiles and fresnels, instead of only specials. "It can take up to seven times as long to focus a moving light, as compared with a steam (sic) light. They are supposed to save time, not

create it. We should be able to do all of this quickly from a computer inter-connected to the main lighting board."

I sent him off afterwards to have a look at **ShowCAD** on **Cerebrum's** stand as a first step in that direction, but I doubt if he made it with the other demands on his time. (*L+SI* plan to publish the first comprehensive survey of top-end automated luminaires in the November issue, followed by a similar controls review in December.)

So let's take a look at what was on Show at the control end of the same issue. **Rob Halliday** has covered the **Compulite Animator**, **MA Scan** Commander and **ShowCAD**, in his piece. **Wholehog**, now distributed and shown by **AC Lighting**, has had extensive previous coverage, as has **Icon**. So I thought I would look at **Avolites** new **Diamond II** and **See Factor's** **Light Co-ordinator**.

The **Diamond II** is an even more transparent control surface for moving lights and scrollers than the previous model from the same company, and owes more than a passing glance at **The Hog**, which seems to be the one to emulate these days. It can operate as a 2-preset 90 channel desk or a 180 channel desk all with 'add' and 'swap' functions for conventionals. Otherwise it provides instant access to up to 180 moving lights, though this is also expandable, via eight encoder wheels and 180 pre-programmed 'hot' buttons and 30 memory faders. These hot keys allow fast access to individual functions or attributes by name and the system includes intelligent patching via personality tables. This allows a more intuitive approach to programming, which can be edited or changed for new instruments as they come along. An electronic dot matrix allows logical labelling of the 30 Memory faders and an electroluminescent screen, or optional **VGA** monitor, provides visual data. The system,



Lining up the Intellabeams on the stand of Lightfactor/High End.



Looking in on Avitec.



Uli Petzold of LMP with Keith Dale of Celco and the Aviator console.



Same console, this time on the stand of Cerebrum, with Dominic Calvert in control.



Helmsman John Simpson steers the good ship White Light while Strand's Philip Lehmann awaits hopefully for a tot of rum.



Marion Smith of DesignLine Lighting promotes the product on the Lighting Technology stand.



Ivor Green of CTS with George Thompson on PLASA's stand.



David Rose (centre) shows Midnight Design's new Portable Appliance Testing (PAT) software.



L+I's Barry Howse with Anna Cimmino of Griven.



Pani trio of Stefan Ettmayer, Hermann Sorger and Peter Winkler.



David Cartwright (left) and James Bishop (right) of Stage Electrics with Chris Osborn of Travelling Light.



Iain Price-Smith of Multiform (right) shows smoke machines from the Effects Company.



Lightfactor Sales' Dick Carrier (second from right) joins the hands of Turkish competitors Haluk Akgun and Halim Ozkan whilst Mimi Giambutas (left) of Mainlight (USA) looks on.



First time at PLASA: Craig Johnston, Wally Blount and Christine Czech of Columbus McKinnon.



Tony Jenner of Triple E on the joint stand with Gerriets.



Graham Muir signs up business for Red X.



Adrian Brooks of Life Structures with Gavin Stewart of Black Light.



Michael Kitching of Mico Lighting and David Churches of Batmink.



The popular PLASA Pavilion for new/small exhibits was designed and built by Lite Structures.

packaged to Avolites' famous bullet-proof standard, is expandable from 1024, on two DMX lines, to 6144 on 12 lines. With a QWERTY tucked away in a drawer, interactive Pan/Tilt controls and with Vari-Lite putting out more instruments accessible via DMX, could the Diamond II provide the solutions Andrew Bridge is seeking? One, admittedly partial, speaker from the floor of the seminar certainly thought so.

Bob See has been around the touring business, running his own rental business in New York State, for several years. It was from that experience as a user, trying to make sense of the control of moving lights when nothing intuitive existed, let alone anything compatible from instrument to instrument, which led to See Factor's Light Co-ordinator.

Now, in its third upgraded version, and available from Neg Earth Lights in the UK, the Co-ordinator doesn't think in channels or numbers but only in instruments - so many moving lights, so many colour scrollers, so many conventional dims and so on - in fact nowhere in the printed spec does it tell you how many control channels you are actually dealing with. In this way each instrument, or group of attributes, may be addressed as an entity with a recognisable designation automatically displayed.



Smoke Machines, pyrotechnics and special effects from JEM.

Programming is via keypad or digital encoder, with pan/tilt focus adjustment from built-in tracker ball. Intelligent patching, DMX addressing and focus facilities all make for easier programming and editing, which we all know are the painful bits. Playbacks are available as 'goes', chases or through 20 overlapping faders which provide direct access to 'stacks' of cues. These submasters operate on the principle of highest takes precedence for dimming or shutter functions, while all other functions operate under LTP.

On the Diamond, HTP and LTP is fully assignable on individual faders, but since the See method is the one most will logically select, I don't think Co-ordinator loses anything by this pre-dedication. Lighting designers will appreciate the ability to shape the desk to suit their preferences, since the hardware is modular, and in addition to DMX the board offers Colour Mag and Showchanger protocols, as well as MSC. A colour monitor is optional. See Factor also offer Color Co-ordinator, a compact desk for control of DMX gel scrollers which works to similar principles.

And what about that protocols debate? Well, at last we seem to be getting somewhere. Everyone at the seminar seems to have accepted that the finer arguments on the technical implementation



Trilite and projection from Optikinetics with the Solar System now in full production.

are secondary to the urgent need to establish a forum for the discussion to take place within a productive framework. It was agreed that this could only be done through PLASA, in association with USITT. Some creative funding proposals were floated and Peter Brooks, the UK's senior statesman, and ex PLASA chairman, volunteered to take on the essential role of cajoling the participants into a coherent body. Finally, the proposition for a two tier approach, tidy up DMX first without blowing the standard, and then move on to higher things if required, received general approval. I really believe that the bandwagon is rolling at last.

Talking about the future shape of DMX and more and more compatible, and less than compatible kit appearing almost daily, XTBA have carved a crafty niche for themselves providing useful little interfaces, splitters and connectors for distributed data links. They also introduced what you might call a DMX laundry, designed by ex-Electrosonic development guru Maris Ensing. This unit, actually called Smartfix, takes in any kind of 'dirty' DMX and re-processes it as the full 1990 version. Check them out also for other useful DMX bits, such as PicoDMX, a genuinely palm-sized DMX diagnostic unit and their network modules for multi-point DMX systems.



The 'PLASA Best Product' Award panel at work with (left to right) Mike Lethby (pro-sound journalist), Derek Gilbert (Glantre), Simon Bruxner-Randall (Imagination), John Harrison (Royal Opera House), Phil Soltys (PSD Electronics) and George Thompson (PLASA Standards Officer) who chaired the panel.



The 'PLASA Best Stand' panel with (left to right) Florian von Hofen (VPLT), chair Nicola Hynes (O'Brien Associates), Colin Gawne (EDR), Ruth Rossington (Lighting+Sound International), Kevin Hilton (Pro Sound News) and Jerry Gilbert (Live!).



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Close examination of the VL5.

While we are on X's all round, it was good to see another refugee from Electrosonic, David Kerr, now representing the Australian Dynalite range of entertainment and architectural dimmers and controls in Europe. His company, **Light Sound Image Systems**, introduced the 'Smart Panel' touch control system for the first time at PLASA.

On desks for control of conventionals, I found the new **LSC Electronics** Axiom range of 12, 24 and 36 channel, 2-preset (plus 'grab') boards, also from Down Under, very pleasing to the eye and very practical in design. These are what might have been called 'laptop' desks, if another industry hadn't snaffled the word first. That is, compact and ergonomic, but with powerful facilities courtesy of modern microprocessor power. The 80 character LCD display, coupled with on-line 'help', an edit wheel and six function buttons, make for 'piece of cake' operation. While four proportional soft patches and the chaining of chases and 'stacks' adds a powerful box of tools for the designer. Again HTP and LTP are assignable. I have followed Gary Pritchard's product range with interest for some years, and these boards will be a useful addition to the spread of really useful theatre kit he already provides. LSC are distributed by XTBA in the UK.

As usual, I was hijacked by **RVE** to look at the latest developments with their Diaphora colour scrollers and their range of intelligent dimmers, on the stand of distributor **ESP Lighting**. In the event, I was glad I went as I discovered some other little gems there at the same time. However, to **RVE** first - the latest scroller is called **Colorart** and it has gone digital, which provides a number of advantages. A yellow LED on the body monitors the incoming DMX signal; all initialization has been eliminated, the unit simply returns to the last cue position on switch-on, and you can use the unit for your desired number of colours, from 2 to 24, with standard 200mm wide frames. Other good features are that the units are protected against over-voltages and interference and if one



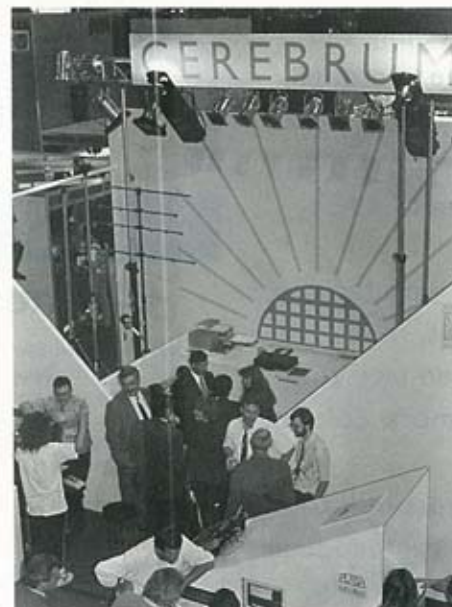
Alan Graham and Gary Pritchard of LSC with the new Axiom console.

unit in the chain fails, it doesn't affect the others. I am sure they also told me that the unit senses the temperature and adjusts the fan speed accordingly, thus keeping the noise to a minimum when the host lantern is regulated. However, I can't find this on my crib sheet, so maybe I made it up. Good idea though isn't it? **RVE** dimmers now have a cute back-up 'snapshot' facility which is simply applied through a laptop PC. They also introduced a budget, six channel by 10A, dimmer/fader pack, called the **Stager**, which has six linear faders and a Master built-in to each 10A output channel, analog remote is also available, as are three by 25A channel versions.

Also on **ESP's** stand, I was re-introduced to the French **Mobil-Tech** range of steel trussing, hoists and stands first noted at Rimini. The arrival of the standard ally truss has rather put steel in the shade,



Tim Corkerton on the stand of Wembley with the 3-D Storm system.



Cerebrum: a centre for lighting control.



Projection talk with Alan Bardouil of Hardware.

but I was persuaded that the inherent strength of the material and its construction, can yield a much slimmer profile and overall lighter weight for the same load rating (see photograph below for the physical evidence!). Anyway, the fact that **Mobil-Tech** are shipping loads of it to the States would seem to confirm that they have a case. (Sorry Adrian, I know **Lite Structures** sells lots of ally truss there too.)

On the 'other items of interest' front, I noted the following: **Hardware for Xenon's** mechanical lens rotation system capable of handling 900 kilos and developed for the Jean Michel Jarre tour (though not seen at Mt. St. Michel); **Laser Grafix** Cyclops head based on the Clay Paky Pincan, and the neatest implementation of fibre optic transmission yet; **Mushroom Lighting**, who get credit for having built no less than 14 of the stands at the Show, were also involved in **Slick's** cantilevered extravaganza, which elicited the remark from one hardened rigger, "F---, it's got no legs!"; Mike Lowe's **Teatro**, who introduced an humungous but totally silent controllable strobe, also demonstrated a PC lantern with frost in the slot, to illustrate what a flexible device the PC can be (instantly, branded the **Reidlight** by this scribe, see also last para of this piece); and Paul MacCallum, of **Wembley Loudspeakers**, was giving a young innovator a helping hand by demonstrating the **3-D Storm**, dynamic sound package on his stand alongside the **BASE** spatial environment system for which they are the distributors. I have heard several such moving sound systems over the years but this one, based on the Atari, was the first to really make the earth move for me and I wish its creators Tim Corkerton and Dave Whittleton good luck with it. Could it be hooked to moving lights guys?

I suspect, in fact, that if people do miss things at these Shows it is the very urge to outdo your next door neighbour in an exhibition context which sometimes makes for a general lack of visibility for the individual gems; a bit like the merchants of that



Stéphane Colin of RVE with Stager 610.



ESP's David Stressing and Hervé Leigeois of Mobil-Tec carry out a structure test.



Dave Smith (left) and Peter Johns with LSD's award-winning Icon.



Wyatt Enever (left) of DHA accepts their Best Product Commendation from PLASA chairman Tony Kingsley.

ancient city in Tuscany, each of whom built a taller building than the next, resulting in an early version of downtown USA today. In this case the prize for the tallest went to **Lighting Technology** and **James Thomas**, whose combined upper deck was plainly visible from the seminar rooms at gallery level, but from very few other places.

Somehow we have lost the benefits of the market system which the French, who probably invented it, call 'à la corde' (in a line) where everything is laid out in neat rows on single shelves, with the great advantage of simplicity of comparison and selection. But then maybe we are deliberately trying to obscure the process? In any event, I sometimes think that the exercise is a great deal harder on the visitor than it needs to be.

So I was pleased to see the introduction this year for the first time of, what the organisers describe as, a Pavilion scheme. Here a number of small companies, who might not otherwise be able to afford to participate at all, were able to band together under a common shell scheme. Although this year only eight companies participated, under an umbrella truss donated by **Lite Structures**, whose original approach had helped stimulate the development, I look forward to seeing the expansion of this scheme into a 'PLASA Village' in future years - providing a show case for emergent businesses which are the future of our industry and for the small service companies which are so vital to its continued existence.

Another Show innovation this year was 'PLASA Daily News' produced by the **Pro Sound News** team. Although inevitably packed with product 'puffs', this 32-page miracle of modern DTP technology kept exhibitors on their toes thinking up new stunts on a daily basis to catch the photographer's eye. It certainly added another dimension to the Show and must have proved useful to visitors looking for a pointer to the latest developments and which stands to short-list for a visit.

Then, of course, there were the glittering prizes. Again this year, two ad hoc PLASA committees walked around the Show and made selections for 'Best New Product' and 'Best Stand'. Obviously, they were spoilt for choice because, in the one case they declared an outright winner with three additional commendations, and in the other joint winners, taking a lead from last year's LDI. Best product was the Sabine FBX 'Feedback Exterminator' available from **Shuttlesound**, which would have proved a useful addition to one of the panels I was involved in when, as is not altogether unusual on these occasions, the microphone took on an alien life of its own. Runners up were **Formula Sound's** AVC2 smart gain control unit, which does the business without compression or limiting; **LSD's** Icon, the touring market's 'alternative' automated luminaire, about which much has already been written; and the pitching attachment for **DHA's** digital light curtain, which now allows two axis of movement.

On the stand front the prize was shared between **Canon Audio**, whose compact speaker had

pupated from something akin to a space warrior's escutcheon, into a ladybird, presumably to illustrate its flexibility for incorporation within interior design schemes; and **Martin Professional**, whose Andy Keightly designed 'Rock' light show was also subjectively described as PLASA's best in ten years - though they didn't get their trophy for that alone, of course, but rather for the practical and innovative use of their space.

On the subject of light shows, however, **Clay Paky** also deserve a special mention here for showing the way with their mould-breaking presentation, first shown at Rimini in the Spring, which put down a marker for others. Another exhibitor who was unlikely to get such an award, were **High End Systems** simply because, although they took a large space in the quiet area main hall with local distributors **LightFactor**, they concentrated their own famed presentational fire power elsewhere: at the Park Inn to be precise, where the banquetting hall was turned into a cybernetic environment by Tim Grivas. What was particularly inspirational about this one was the clever way that the speech was woven into the show, so that you were always aware of what you were watching, without being over conscious of the cue when it came. It just flowed. And it seemed like a totally automatic and animatronic performance, I assumed from SMPTE, though I am told that Tim insisted on hands-on throughout. Though I can understand why the organisers would not wish to encourage others to follow suit, this partial removal to another place, also solved any potential sound problems at a stroke.

As usual, I had my own little poll to see how far away I was from the judges. This year my accolade goes to **Wybron** for their most attractive colour-changing wall which combined the art of attention-getting with the best possible product demonstration for a scroller imaginable. (Though



Formula Sound's Sandra and Tony Cockell with the AVC2 volume control unit and award.

there was also disappointment over the absence of Auto Pilot which, despite rumours to the contrary, is still in purdah, with Keny Whitright threatening his software writers with the sort of punitive measures normally associated with Arabian justice, should they fail to deliver by LDI).

A close joint second, in my book, came **Syncolite** and **Stage Electrics** for their stage sets, though as I told the former, the posters were a bit of a giveaway. Is it a coincidence, I wonder, that Daryl Vaughan is connected with two of those three?

Another place again, this time the Hippodrome looking remarkably spic and span despite its age, was the venue for the **Disco International** awards, which are far too numerous to mention, so it is sufficient to say that the main product trophies went to: the Golden Scan 3, Pulsar Masterpiece, the NJD Electronics IQ250 mini projector, Laser Grafix' Nexus, Kaleidolight video system, JBL Control series speakers, Amcron MA-5000 amp, Formula Sound PM90, Denon 2000F CD player, and Citronic who picked up two awards as 'Manufacturer of the Year' and 'Best Mobile Mixer' for the SM250. All of which gives me an excuse to let off about the social events surrounding the Show.

OK, before you say so, I know I am getting old but I have a feeling that I have general support for the following request: Could we please have at least one informal evening event where exhibitors and others can mingle and talk without getting their ears blown off and their eyes fried? We get that all day. Maybe the Sunday night is the time for this, I am not sure. What is certain, is that this year's event on that night, while it was well organised and fun for some, was too socially divisive to be labelled a PLASA supported event while it is absolutely vital that PLASA retains the best possible links with BEDA, our organisation is now a much broader church and this needs to be recognised. Think again please.

Lastly, two days before PLASA I was privileged to address a bunch of young lighting designers from all over the world, participating in Francis Reid's British Council 'Theatre Lighting-Design and Technology' course: my subject was 'Future Technologies'. Francis, who is fast becoming known as 'one spot' Reid, for his campaign to establish a higher profile, if I can use those words in this context, for the humble Pebble Convex, does all of this without commercial bent and with immense good humour. In so doing, he does a wonderful job for the future of our industry for which we should be duly grateful. He has been and remains a great ambassador for all that's good about the British theatre lighting business. His idea this time, to overlap the course with the Show, was an excellent one, and I saw many of the young enthusiasts plunging headlong into intense scrutiny of the equipment on display. I am going to stop eulogising before Francis begins to feel like a man reading his own obit.

Good show Francis and good Show PLASA.
Tony Gottelier



Stage Electrics themed dimmer room stand.



More control from ADB.

Earls Court was the venue once again, and once again managed the same trick that fooled Graham Walne last year - the aisles never seemed over-crowded, the show never seemed quite full, and yet, somehow, attendance was up on 1992 by a not inconsiderable amount.

Renewed interest? A long-awaited, clear sign that the recession is over? Well, maybe - or it could just have been more people coming to see what they couldn't afford. Yet more than one manufacturer commented that business has been picking up of late, though not in any coherent manner. They also pointed out, though, that the reduced turnover over the past year has hit research and development to some extent, which might explain my slight disappointment with the show. Yes, there were plenty of companies exhibiting and a fair amount to see, but there wasn't any revolutionary new product - no new equivalent of the scroller or the moving light to make you stop and think wow! Perhaps just about every opportunity has been covered already. Maybe I won't be satisfied until **DHA** do launch the BendLight, mentioned in Philip Nye's July viewpoint on a successor to DMX512, which did lead to a fair amount of discussion at the show!

No, this year seemed to be one of evolution rather than revolution. Indeed, **DHA** themselves demonstrated this most clearly with their pitching



An overview of the Arri stand.

digital light curtain - an adaptation of the DLC which allows the whole unit to be tilted along its length as well as about its axis. This unit, requested by Richard Pilbrow for a production of *Showboat* in Canada, as well as the six-lamp unit built for *Sunset Boulevard*, showed that the spending power of the large-scale musical remains undimmed. The company also launched their gobo library system, where more unusual gobos are made to order but without the tooling charges of custom gobos. **DHA's** need to hold large stocks of designs is presumably also reduced, with the service thus acting to everyone's benefit.

If an even more specialised design is required, **M&M Camelont** were offering one solution with Gobomaker, a custom gobo production kit which allows a design to be hand-drawn or laser-printed and then etched using the supplied chemicals and dark-room in a brief case, all for a fairly competitive price. They also demonstrated evolution with the waterproofed Alfresco Rainbow scrollers and even-more sizes of the standard Rainbow, all with the option of the new PlusCard to give smoother colour movement and additional desk-control over fan speed. And they had on show one of this year's standard exhibits - a moving light desk. On their stand it was Scancommander, manufactured by MA Lighting of Germany. Control is via DMX, however, it



DHA's new pitching DLC.



Mark Thompson (right) of Arri shows Imagine 3.

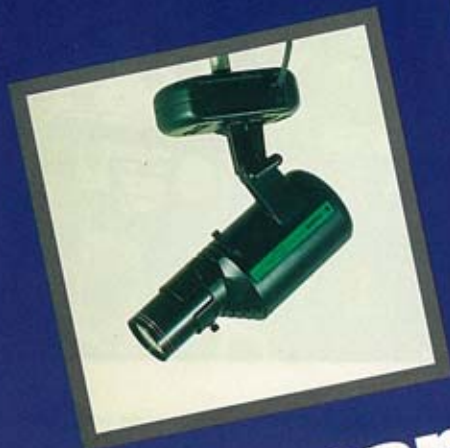
allows 'personalities' for different types of moving light to be defined so that once a lamp channel is chosen, its other attributes (colour, pan, tilt etc) are automatically assigned to the other control wheels. This feature now appears to have become fairly standard, but the Scancommander's neat touch comes with colour, where particular colour combinations can be defined and named for easy recall - similar to the palettes on Flying Pig's award-winning *WholeHog*. It also allows old moving light chestnuts, such as circles, to be accomplished with ease. All very neat, though as with most moving light desks, there is quite a lot of learning involved to start with.

The new Imagine 3 on the **Arri** stand, while billed as a moving light desk, doesn't have anywhere near the features of a desk like the Scancommander or Computites Animator, yet I felt it was perhaps the most important new product at the show. Visually similar to the well established Imagine 2 - the most obvious difference is that there are now two control wheels - the desk is completely new inside, based around a much faster 32-bit processor. The claim is that up to 1536 DMX channels can now be updated at the maximum DMX rate with 8-bit resolution. Support for effects and for the designer's tablet are both improved, and basic moving light support is added - channels can be linked, so that when one is selected onto one wheel the other appears on the second, giving, for example, lamp level and scroller colour. Levels can also be held, so that the moving lights don't all return to zero when the master is pulled down, and inverted for pairs of lamps mounted in opposite direction. No, not extensive moving light support, but important firstly because the desk's software can be updated simply via floppy disks, which Arri intend to provide at minimal cost, and secondly because the desk is replacing the Imagine 2 in Arri's product range - at the same price - to make an upgradable desk with moving light capabilities the standard controller, rather than a hired-in extra. This is perhaps the clearest indication yet that moving lights and scrollers are now standard technology in theatre.

Arri also gave the ETC Source Four spotlights their first UK showing. Basically this is a hi-tech ellipsoidal; a compact, fixed focal length profile (though the beam angle can be changed simply by repositioning the lens in the unit rather than replacing the lens tube) using a custom quad-filament axial bulb in front of a dichroic glass cold mirror (à la VL5). This means that the lamps heat passes out the back of the unit, leaving



Latest recruit to the M&M Camelont fold, Claudia Lewis, shows their new custom gobo production kit to Theatre Projects' Peter Marshall.



coemar



tas



DARE



lite **structures**



zero88



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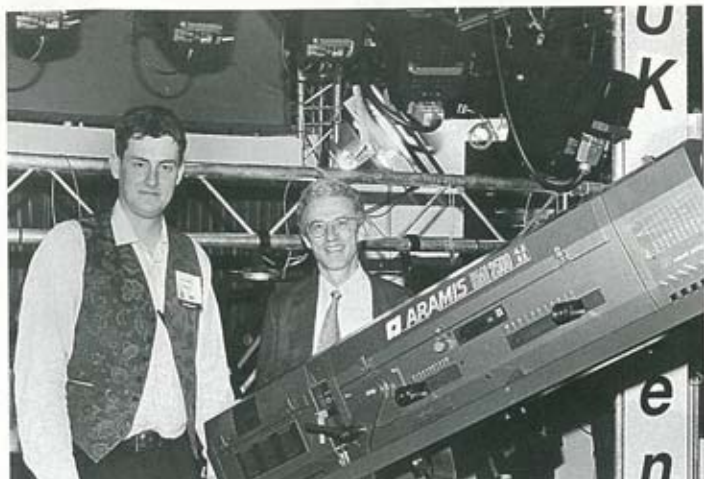
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Tom Mannings of Decoupe (left) with Jean-Charles Juliat.



Studying the CCT range.

the front, along with the shutter, gobo, iris or whatever, cooler. Brightness is claimed to be greater than a 1000W ellipsoidal, and though it was hard to tell in Earls Court's daylight, this looks like a very promising unit. The stand also featured Evolution - a mini version of the Smart Rack digital dimmer, for small installations or possibly for use by Vari*Lite in touring dimmer units. Vari*Lite, despite the competition, still cause a buzz, and it is amazing how many companies talked very proudly of even the vaguest link with the legend of moving lights - which isn't really surprising given the impact they've had.

VL didn't launch any new products, either - evolution again, with the VL2C offering a refinement of the old 2B, but then why should they when they are still the standard by which all others are judged at the top end, and with the VL5 creeping in to more and more low end productions. They did show their corporate sense of humour, though, with their contribution to the mirror vs. lamp movement debate - a large mirror mounted in a VL5 yoke, a series of which were spinning away at the top of their stand. According to Brian Croft they may yet go into production...

To me, the biggest thing about the official launch of LSD's Icon moving light is that it doesn't look like a Vari*Lite - unlike many others, the shape is completely distinctive. Moving lights are an area that cannot really be judged without hands-on experience on a show (although the boys from Samuelsons were trying to take in as much detail as possible from the stand!), but the Icon and its rotating gobos did look very promising indeed. I eagerly await a low-cost Icon5 for theatre

use! Not that theatre users were all that hard-done by at this show, even if the still-lights, whatever their quality, lack the sheer appeal and excitement of the wobbly-buckets. On the home front CCT were showing their new wide-angle 28-58deg lens for the Silhouette - a beautiful tube that goes hard at wide angle yet still gives clean cuts without a hint of shutter curvature. And it's the same size as the old Sil 30. Hurrah!

I'd read about the Robert Juliat units in the Sunset Boulevard write-up, but they still stunned me even given their favourable reception there. They feel like quality items before you even turn them on, with superb build. The beam, even on the tungsten units, is superb, and the discharge units are simply stunning, with the DMX-controllable dimmer-shutter sweeping aside many of the old arguments about using discharge lamps. Oh for a large enough budget!

Also up in the profile stratosphere were the Niethammer range on the Zero 88 stand, while working down the price range led to offerings from Selecon, with their range of luminaires from 500W to 2500W on the stand of AJS, Teatro, who have also added condenser-optic versions of their range (alongside a very neat DMX strobe unit which can deliver single as well as multiple flashes and has barndoors for focusing), and ADB, with two new zoom profiles, the DN204 and DS204, 2kW condenser-optic units coping very well with the long throw to the hall's front wall. ADB also launched the Eurorack 60, a new generation of compact, all digital dimming systems, which once complete will include several sizes of compact cabinets and two levels of small 6-channel

portable packs. Lastly, they brought with them a new family of lightweight 500/650W spotlights consisting of five units, intended for the budget-end of the market.

Strand's condenser-version of the Cantata, called Optique, was also on show, the extra lens giving a very clean beam indeed, and they had the new Leko, launched earlier this year but still not available in this country due to the seemingly insatiable demand in the USA. A head-to-head with the Source Four would certainly have been interesting!

Strand also launched their GSX control. This is the desk that will replace the M24, and seems to show the way Strand desks will go in the future. Its features are chosen via floppy disk, for example - the basic unit arrives with a disk to give control over anything between 25 and 125 channels, while optional disks add effects, scroller control, MIDI and so on; the basic system should appear at a price comparable to a low-end PC. A bit, I have to say, like I suggested last November, though Richard Harris did quickly suggest that development was underway before my piece appeared. Aside from the software expandability, the GSX shows the future by allowing the operating method to be customised to be 'direct action' (like a Galaxy) or 'command line' (like a Light Palette), allowing it to be an international product and surely indicating the basis for the company's next generation of large scale controller. In the context of the protocol debate, is it significant that Strand's stand was entirely run on DMX512?

Complite have taken a different approach to the control debate by expanding their Animator



The White Light Group sail in.



John Revill (left) of Central Television with Mike McMullan and Barry Hampson of Playlight.



Brian Simmonds (left) of Futurist with Jeff Demain of Spectrum PD.



A general view of the Strand stand.

desk to allow it to output different control protocols for different lamps on the same rig, which works very well but, in the long term, is perhaps not the most efficient way of controlling rigs. The company also introduced a remote macro box and submaster wing for the desk, to help with the control of large rigs. And for those who want movement but can't afford the production units, they showed the Universal Moving Yoke, designed to fit to fresnels or Parcans and be operated via DMX or from the Animator. Again, it is hard to judge without real hands-on experience, though its a potential winner if it works well.

As always, most of this equipment can be hired as well as bought - probably the reason DMX continues to prosper - and the hire industry was well represented, though their approaches differed. **Stage Electrics'** stand concentrated on the company's installation business, featuring a mock-up backstage area with prompt desks and socket panels. **Playlight** showed a selection of products, while **Futurist** preferred merely to describe their service to interested clients.

White Light occupied their customary position near the front-door, their stand this year having a nautical theme, with the upper deck featuring a ship's wheel and even a smoke-puffing funnel. Their new catalogue was available and is as invaluable as ever. A disk-version is promised soon, but please can we have it in Mac format as well as for PCs? Especially now that **Modelbox** is distributing the excellent MacLux Pro Macintosh lighting design program in the UK. Peter Byard gave what seemed to be one show-long demo of the rest of the product range, including a preview of the new Flyman flying management program.

Computers continue to spread, of course, both for information management (with systems such as **Midnight Design's** Catalyst portable appliance testing record software, which knows about slightly unusual theatrical equipment such as multicores as well as looking good on-screen), design (with **Shuttlesound's** ShuttleCAD system for producing engineering drawings of sound equipment looking very impressive) and, of course, for system control. **Cerebrum's** ShowCad, for example, was back again after a year of software upgrades on disk, some time ahead of the other manufacturers! This system continues to find favour in many applications, including running the lightshow on the **Coemar** stand. A shock-proofed flight-cased version was on show for those whose systems have to survive such



A multitude of lighting 'boffins' on the Cerebrum stand: Iain Price-Smith, Mick Martin, Mark Tonks, Gordon Pearlman and Yves Ruellan.

conditions, while the system's author, Mick Martin, demonstrated how his program could be used as a controller for any number of alternative input devices - such as turning a 24 channel lighting desk into a multi-talented control surface.

At the next level of control up - co-ordinating individual controllers rather than actually controlling the sound or lighting - Charlie Richmond's Stage Manager MIDI show control program was once again on show on the **Glantré** stand after a successful year in the UK, where it is now controlling the sound systems on a number of shows. The new version adds DOS messages, where a message box can be triggered by received data to indicate a problem to the operator; the system's importance will continue to increase as other devices - ranging from **Howard Eaton Lighting's** SoftCue cueing system to **Rosco's** Omega smoke machine - arrive with MIDI control options. The importance is probably most clearly demonstrated by the fact that rivals have started to appear, such as the Multi-Art Theatre Sequencer from **Theatre Projects**. Certainly as shows become more complex to control - often because a single lighting controller can't cope and several have to be driven by one operator, such control programs become essential.

But away from computers. The other odds and

sods of the show? Well, a huge haze of new smoke products, probably to ensure that the moving beams of the new lights are clearly visible. Following on from the Smoke Factory's Skywalker lead, almost every smoke machine can now be run via a 0-10V control signal to allow control from the lighting desk. And there were two other trends. The first was for haze (in complete contrast to the trend for heavy smoke of a couple of years ago!), with **Jem's** Water Cracker competing with the established DF50 unit. The Jem unit is noisier, but the noisy bit can be positioned away from the rest of the machine and the compressed air then ducted in for quieter operation. The second trend, again started by the Skywalker, was for smoke machines that don't look like smoke machines, with the cylindrical **JEM J1** and **Rosco's** Pencil Fogger unit, designed to be hidden in props where ducting isn't possible. **Le Maitre** kind of avoided the second trend, but showed their Genesis machines once again, while **Mainstage** and **Multiform** had the range from The Effects Company, also seen at the ABTT show earlier this year.

Other bits and pieces? The main ones were new colours from **Lee Filters**, including a double-201 equivalent called 200, Surprise Peach (017) and Palace Blue (198) which I look forward to trying;



Mike Lowe (left) shows off Teatro.



Mark Morley of AJS (left) with Selecon's Jeremy Collins.



Matthew Tonks and Derek Gilbert of Glantré (right) with Charlie Richmond of Richmond Sound Design and Anna Pillow of PLASA.



Chris Cook of XTBA with Gary Pritchard of LSC.



Lee Filters trio of Adrian Marsh, Paul Topliss and Graham Merritt.



Getting to grips with AVAB's Super Viking on Zero 88.



Looking towards the 'sound' area with Penn Fabrications' stand to left.



The busy 'market' area of Pulsar/Clay Paky (left), Avitec and NJD (right).



Another general view with Laserpoint's revolving 3x3 Ramwall centre right.



Lighting and its control: the Strand Lighting stand.



A new-style stand launched Wybron into the UK.



A host of industry names from AC Lighting.



Projection in operation on Ludwig Pani.



The award-winning Canon Audio stand.

more DMX goodies from **XBTA**, whose products are now cropping up all over the place; a very neat stand from **Martin Audio** (I don't really know about the loudspeakers, but the stand, which folds out of a standard 20-foot container to give a nice, sound-proof enclosure while at the same time being easy to set up, pack up and transport between shows is a masterpiece of design); and something called Bonjo from the Great American Market, a gobo angling device. I said at the start that the main feel of this show seemed to be evolution. It's just that sometimes that slips towards derivation!

Overall then, an interesting and enjoyable show, which clearly demonstrated that many of the high-tech, big-budget products of yesteryear are now becoming increasingly accessible to just about everyone - a trend which will undoubtedly continue. But as we finally kick clear of the recession, and the money picks up once again, please can we invest in R&D to get a product to really excite me?

And if we're going to do that, please can we stop squabbling and invest the time and effort in a control standard to ensure that we can all use whatever that great new product is?

Robert Halliday

Show Sound

Sound equipment was an essential and prominent part of a generally vibrant event. Initial impressions: the quality of equipment and presentation was very high - with several rigs attaining loud hi-fi status - and there was a greater diversity of equipment than last year.

While there was an inevitable emphasis on live and disco equipment, sound manufacturers were covering many bases from a two-speaker mobile set-up to concert rigs and communications for theatre applications. Affordable radio mics and CD systems for DJs were also notable themes. It was also remarkable how much US-made equipment was on display. While there is nothing to say that American gear has to be better, it does show that people are taking sound seriously if they are prepared to import speaker enclosures from the other side of the Atlantic.

A lot of audio exhibitors expressed the opinion that the PLASA show was the most important event in the UK for them, not least for its ability to pull in visitors from across Europe. It was also encouraging to see - as well as hear - how many exhibitors were capable of co-ordinating a really slick sound and light presentation. This, and the first signs of the video medium creeping in, auger well for a truly multi-media PLASA Show in years to come.

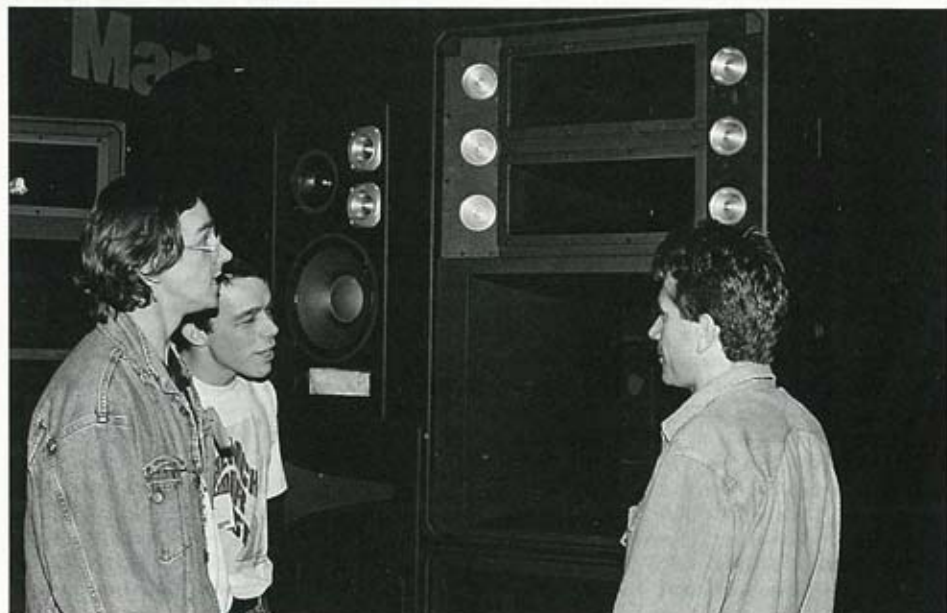
Theatre and Touring

For some years the trend in the concert touring and theatre markets has been towards compact speaker systems, with modular full-range enclosures which can easily be flown in arrays and clusters. Bucking the trend to some extent was **Acoustic Sound Systems**, which had tough looking enclosures in the traditional rock and roll configuration of bass bin, mid range cab and upper mid horn with bullet tweeters. The system certainly looked like it could kick, err, ASS. **Adam Hall** introduced Alcatel's new IDC connector as the world's first solderless audio connector, along with other products from the Alcatel range for which Adam Hall now has the European distributorship. From the 'flying school' of PA, **Apogee Sound** - UK importer of the US-made Apogee systems was showing the Artist 800 rig and the AE-8B stage monitors. Illustrating the diversity of PLASA, Apogee also had the THX MPTS 1 cinema system on display, as well as the new CRQ-12 parametric equaliser, which offer six bands per channel.

Audio Projects is the importer for US manufacturers Renkus Heinz and Crest, which



Design masterpiece: the stand of Martin Audio.



Bucking the trend: Acoustic Sound Systems.



Gwen and Micheal Leaver (left) of Adastra with Brenda White and Ken Walker of SCIF.



Mixing with Ecler.

makes a range of mixing consoles as well as the incredibly butch 10001 amplifier rated at 3,500W per channel into two ohms. The latest from R-H are the CE enclosures using CoEntrant Waveguide technology, a loading technique designed to provide point source delivery and 'near identical' delivery in the horizontal and vertical planes. **Autograph Sales** had the US manufactured Meyer speakers on display as well as a complete line of products that included ClearCom communications systems, QSC amplifiers and Micron radio mics. For the show Autograph ran a special offer on its K&M microphone and speaker stands.

Beyer Dynamic is the UK importer for the German-manufactured microphones and headphones of the same name. The company was also showing the Soundtracs Sequel II front of house touring console in 24, 32 and 40 input frame sizes. The desk has eight VCA groups, eight audio subgroups and eight VCA group mutes. **Celestion**, which has been making loudspeakers since 1924, launched its SRA series of power amplifiers. Two models are available. The SRA 1000 is rated at 510W RMS @ 0.1 THD both channels driven into four ohms. The SRA1600 is rated at 815W by the same criteria. The manufacturer specifies a 10Hz-20kHz bandwidth at rated power. Celestion was also showing the SR range of compact, high efficiency speaker enclosures and companion electronic controllers.



Hans Freytag of C Audio and Andy Wood of Harman Audio with C Audio equalisers.



First time at PLASA: John Henry Enterprises.

Eminence Speakers - imported from a well-known country somewhere between Canada and Mexico - had the new Pro Series on show. Designed for very high power applications, the largest unit has an 18" cone, a 4" voice coil and a power handling of 600W RMS. Even the smallest driver, a 10" device is available in versions with 200W and 300W power handling. All Pro Series drivers are equipped with cast aluminium chassis, which combine mechanical resilience with low weight. Eminence was also showing two co-axial Pro Series models, where a 12" of 15" cone driver is combined with a centrally mounted horn and compression driver arrangement. **EMO Systems**, which specialises in mains distribution, interfacing and direct injection boxes, unveiled a sequential switching system which can be linked to **Formula Sound's** Sentry environmental noise control system. EMO also offers full current rated EMI filtering for its main distribution panels.

EGi (Electroacustica General Iberica) is a distributor of British equipment in its native Spain, as well as a systems manufacturer. Perhaps not surprisingly, the company was featuring its own products at the Show, particularly the new Domos speaker system. **Eminence Audio** is a small UK manufacturer of sound reinforcement enclosures and power amplifiers. It also makes the Lighting Jack distributed world-wide by A C Lighting. Despite being a family business, Eminence exports to 26 countries. At PLASA, the company had its



Tony and Sandra Cockell of Formula Sound celebrate 20 years in the business.

Hz loudspeaker systems, which included the SB600 sub bass enclosure with unique dual voice coil 18" driver and polyethylene cabinet. **Glantr Engineering** had on demonstration the Richmond Stage Manager system, around which it has based several recent installations including the Warner Bros display at the Arndale Centre in Manchester and a massive contract for P&O to provide sound, lighting and other equipment for the Oriana super-liner.

The point about Stage Manager is that it is a software-based controller that will address virtually any piece of equipment in a show or installation. Even if the unit in question does not speak DMX, MIDI, Show MIDI, SMPTE or any other protocol known to human kind, it can still switch the unit via relay. That means integration has extended from the lighting and sound controllers to the curtains and kettle. Richmond was showing the system at the last PLASA, but its capability have extended since then. President of design and engineering Charlie Richmond said that he hoped the system would be able to go into a second phase, whereby positive confirmation would be sent back from the remote devices, enabling the operator to see at a glance that everything was going to plan.

Harman Audio had so much gear on show that it was more a case of 'reserve a couple of spreads' than 'hold the front page'. Day one saw the launch of Allen & Heath's latest desk, as well as a visit from senior JBL executives, who had flown in from the US specially to be at the show. The Allen & Heath GL2 is an 18- input 'does everything' mixer that can be used for FOH and monitoring, and comes in a 19" casing.

Launched at PLASA by JBL was the SR Series II sound reinforcement system. An expanded Sound Power Series has now been split into MI, smaller PA, concert touring and installed lines. Harman was also showing EAW enclosures, including new high power bass cabinets. During the show, distribution and hire company John Henry Enterprises confirmed that it had bought a 28-box EAW system comprising KF850 and DV850. Contract value: around £140,000.

Given that Harman has just bought AKG, which includes subsidiary sound reinforcement enclosure manufacturer Turbosound, it will be interesting to see how distribution arrangements pan out. Can Harman Audio in the UK really distribute three major SR speaker lines?

Turbosound meanwhile, was showing the TFL Floodlight system for the first time, following extensive road testing. Designed to be used as a stand-alone or built into larger rigs, the Floodlight system comprises a low bass enclosure and a



Richard Frankson of Meridien (left) and Guy Hawley of Harman Audio discuss Allen & Heath's new GL2 'does everything' mixer.

Personality Parade



Pio Nahum (Clay Paky), Michael Oleson (Nor Business) and Ben Weijters (CP&P Benelux).



Ken Priddy of Lighting Technology with the touring version of the ARRI SmartRack.



John Copen of Cirro-Lite, with Dan Martino and Adrian Offord of Wybron.



Andrew Bridge with Alan Luxford of Strand.



Jon Reay-Young (DeSisti), Gerard Jongerius (Flashlight), Mario DeSisti (DeSisti), and Fulvio Cotogni (Rank Lighting Italy).



Nick Jackson (left) and Terry Lees of Light & Sound Design flank Zero 88's Freddy Lloyd.



Production Arts' Steve Terry with David Catterall of Zero 88.



Ian Albery of Donmar with Paul de Ville of Compulite.



Strand's Brian Myers and Showlight's Ken Ackerman.



ADB's Christian Léonard and Tim Burnham of ARRI.



David Brooks (left) and David Bertenshaw of Strand with Clive Salmon of G E Lighting (right).



Coemar's Bruno Dedero and Ivan Burato with Ian Brown of Coe-tech (right).



DeSisti's Bill Smillie with Michael Samuelson.



David Wilmore (Harrogate Centre) and Terence Rees (Localite).



Martin Kelly and Martin Audio's EM15.



Chiara Pellicelli of Teatro.



Avolites' Nuri Waheishi and Rick Salzedo.



Lou Farina of Lycian with Midnight Design's David Rose.



Daryl Vaughan (Syncrolite), Brian Croft (Vari-Lite) and Keny Whitright (Wybron).



Derek West shows Tannoy's new CPA 10SXB.



Crest's Tim Chapman with Paul Ward of Network.



Shuttlesound's Tony Oates with the Product of the Year Award for the Sabine FBX900.



Adrian Brookes of Lite Structures with Darryl Thorpe of Ohm.



Ewen Atkinson of Shuttlesound with ShuttleCAD.



Trantec's Chris Gilbert hard at work.

mid/high box housing the new Axehead mid device, for which 'tight and even dispersion' is claimed.

Network is a recently formed UK distributor and a first time PLASA exhibitor. Products showing for the first time included the new Nexo PS15 speaker enclosure with a single 15" woofer and a 2" high frequency compression driver, fitted with a titanium diaphragm. New from Klark Teknik on the Network stand was the DN3600 programmable dual one-third octave graphic equaliser, which has a security code lockout to prevent unauthorised use. Also showing were two new amplifiers from Swedish manufacturers Lab Gruppen.

Hill Audio was showing its latest TSA1602 power amplifier which delivers 3kW in a 3u package. On the console side were Stagemix and Datum, aimed at clubs and bands. Hill has also recently taken on distribution of the Ross line of PA equipment, giving it an entry into a lower level in the market.

Marquee Audio was demonstrating a broad range of equipment including the hitherto unseen Soundcraft Vienna II FOH console and SM16 monitor console. With the Vienna II, Soundcraft has updated its mid-range, VCA automated, live sound console with a number of new facilities which both enhance sound quality and increase operational flexibility. Marquee were also showing a Soundcraft Europa fitted with Out Board Electronics automation. **Martin Audio** had its complete range of enclosures on show, including the LE, CT and F series. Showing for the first time were the high powered, low profile stage monitor LE350 and the ultra-compact trapezoidal sound reinforcement enclosure EM15 with ICT technology control system. At last year's PLASA Show, Martin Audio caused something of a stir by launching the EM Series, the first time the manufacturer had used active control electronics.

The recently-formed **Multi-Remote**, with Bruce Elliott at its helm, unveiled BEC Technologies' Proline System, designed to transmit 'digitally clean' audio over both copper wire and fibre optic cables. **Ohm Industries** had no less than 17 new products across three ranges of speaker enclosure. The smallest MR system is recommended for hotels and conferencing; the LE system is designed for bars, pubs and clubs, while the BR system is designed for live venues and anything up to 'a full blown rave'. Ohm also chose to hold its dealer awards at the show.

RCF Electronics UK, a subsidiary of the Italian manufacturer, was showing complete systems as

well as the chassis drivers it supplies to other makers, such as Martin Audio, EAW and Nexo. Showing for the first time in the UK was the Monitor 8, recommended for club and cafe installations as well as AV and monitoring applications. For larger installed systems or touring applications, RCF offered the Process Control System, an integrated system based on a choice of two-way enclosures, a subwoofer and active electronics that includes power amplifiers and a control unit. The CP512 and CP515 two-way enclosures are fitted with flying hardware.

SCV produce an extensive range of pro-audio equipment and used PLASA as an opportunity to showcase products from the recently acquired LA Audio. These included the Multi Gate 4x4 frequency conscious dual gate and dual compressor combination. Of particular interest to contractors is SCV's own universal buffer system featuring an ever-increasing range of problem solving modules.

Shuttlesound is the UK distributor for a number of US manufacturers including loudspeaker and microphone specialist Electro-Voice, as well as amplifier maker Amcron. An innovative addition to Shuttlesound's range is the Sabine Feedback Exterminator (recipient of 'Best Product Award'), which automatically hunts out troublesome frequencies and 'notches' them out before the onset of feedback. The distributor was also showing ShuttleCAD, possibly the fastest draw in the West when it comes to working out rack space and producing diagrams for panels and wiring.

Tannoy had its new SuperDual speakers on show. The heart of the system is the CPA10S mid-high cabinet which handles 1kW of programme power. The companion CPA12.3B bass unit is loaded with three long excursion 12"



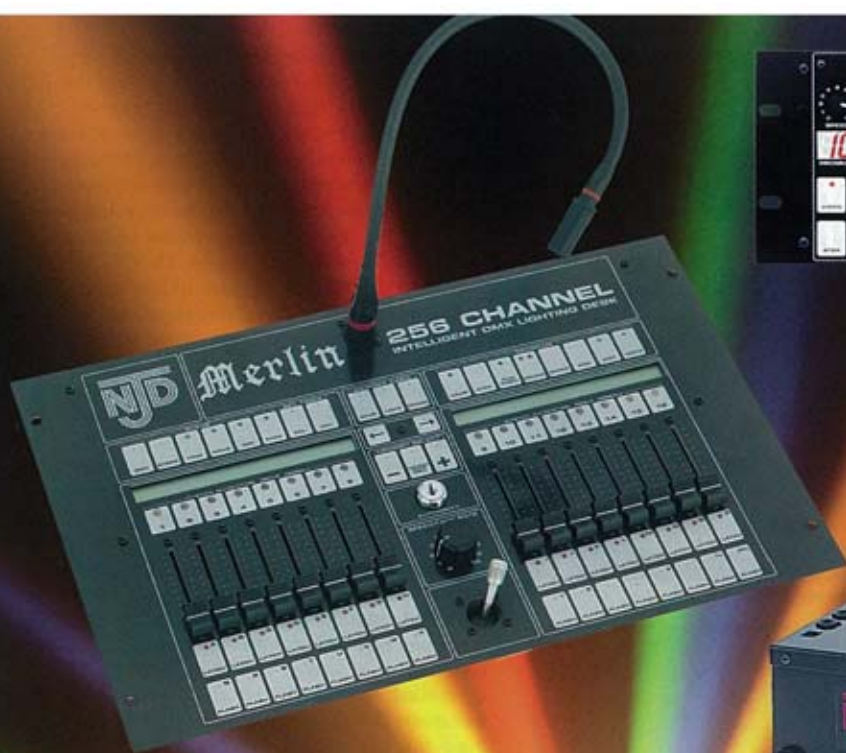
Soundcraft's new Vienna II console was to be found on the stand of Marquee Audio.

drivers. The first customer for the speakers was the Royal Shakespeare Company at the Barbican Theatre in London. **Trantec Systems** launched the S2000, a new radio receiver designed for use with guitars or a range of microphones. S2000 is a 'true diversity' system with two fixed telescopic aerials mounted on a durable metal casing. It is fitted with a multi-LED display which gives indication of power, RF carrier selected, audio presence and clipping. Trantec microphones available for use with the S2000 include hand-held, lapel and headband systems. All hand-helds are fitted with a high quality dynamic capsule but the well regarded Shure SM58 capsule is available as an option. Trantec was also celebrating the 10,000th sale of its S1000 wireless system. Wharfedale subsidiary **Fane** announced during the show that Adam Hall had been appointed as UK distributor for its line of loudspeakers. The move follows the acquisition of Adam Hall UK by Adam Hall, the German Fane distributor for 17 years. Wharfedale themselves launched a further addition to their established Force series of sound reinforcement products - the Force 105B sub bass unit.

Disco and Installation

Avitec Electronics demonstrated an impressive ability to integrate sound and image with the lighting desk running in sync with an ADAT eight track digital tape recorder; a more common sight in a recording studio. The soundtrack was delivered by Ramsa amplifiers powering Cerwin Vega speakers (made in, you guessed it, the US) with Ramsa speakers as well. Showing for the first time in the UK were the Cerwin Vega ProStax sound reinforcement enclosures: PS-12F is a three-way system with a 12" bass driver coupled with a mid-range horn and a 1" horn loaded tweeter. PS-15F is similar in design but has a 15" bass unit and a larger mid-range horn. There is also a smaller PS-10 two-way system with a 10" bass driver. PS-215B and PS-18B subwoofers were also in evidence. All the full-range units are available with flying hardware or in installation versions. **Bose** augmented its line of high quality speakers for installation by showing the Panaray system for the first time in the UK. The distinctive-looking system consists of mid-high frequency arrays in curved enclosures, in combination with a Bose Acoustimass bass unit. The system is designed for high intelligibility in speech-only applications.

Beyma, the well-known speaker supplier, introduced a new G480 18" speaker to its range.



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David Hoffman and Roy Millington show the latest from Cloud Electronics.



Roger Harpum of Malcolm Hill Associates shows their Chameleon range of amplifiers.



Intimidation promoted 'Challenger 1'.

Canon Audio which has carved a niche for itself in a not-dissimilar market to Bose, launched the VSB subwoofer as a companion to the V-100 wide dispersion speaker. Like the V-100, the VSB is quadrant-shaped for the maximum number of mounting configurations and has the same pre-mounted bracket for fast installation.

Cardiff M Disco Services had its twin CD console on show. Available at prices ranging from

£750 in powered and unpowered versions, the system uses two Denon 19" rack mounting 659 CD players with pitch control and a Cloud 700 mixer. The top of the range powered model is equipped with 450W per channel of Mos-fet amplification.

Citronic had a complete product line encompassing amplifiers, equalisers, signal processors and mixers. The smallest mixer is the

SM150, which combines a couple of simple phono inputs with crossfade, mic input and headphone cue. Citronic was also showing its more advanced remix consoles and the SL1000 sound level control system, which is designed to allow venue control over sound pressure level.

Cloud Electronics' latest products include two mixer/zoners, for controlling sound levels and distribution across different areas. The CX122 has two zone controls and two sets of line inputs, as well as a mic input and two band equalisation. The larger CX233 has three zones, three line inputs and two mic inputs. Cloud was also showing its twin-deck disco consoles and mixers from the modular CXM series and CXM non-modular series.

Formula Sound, now 20 years young, showed their PM90 modular mixer; well established in up-market discos. There was also the System 2000 modular production mixer for community radio stations and multi-purpose venues. The AMX6 is a six-channel mixer designed to be used by unskilled operators. The Sentry environmental noise unit is aimed at clubs and venues where the sound level of artistes or visiting discos is to be controlled. Formula Sound also offers the AVC2 automatic volume control, unit, which is fitted to the output of a sound system and is said to reduce output level in discrete steps when the pre-set limit is exceeded, making it almost undetectable in use. The manufacturer claims the AVC2 is less obtrusive than systems which employ compression or limiting.

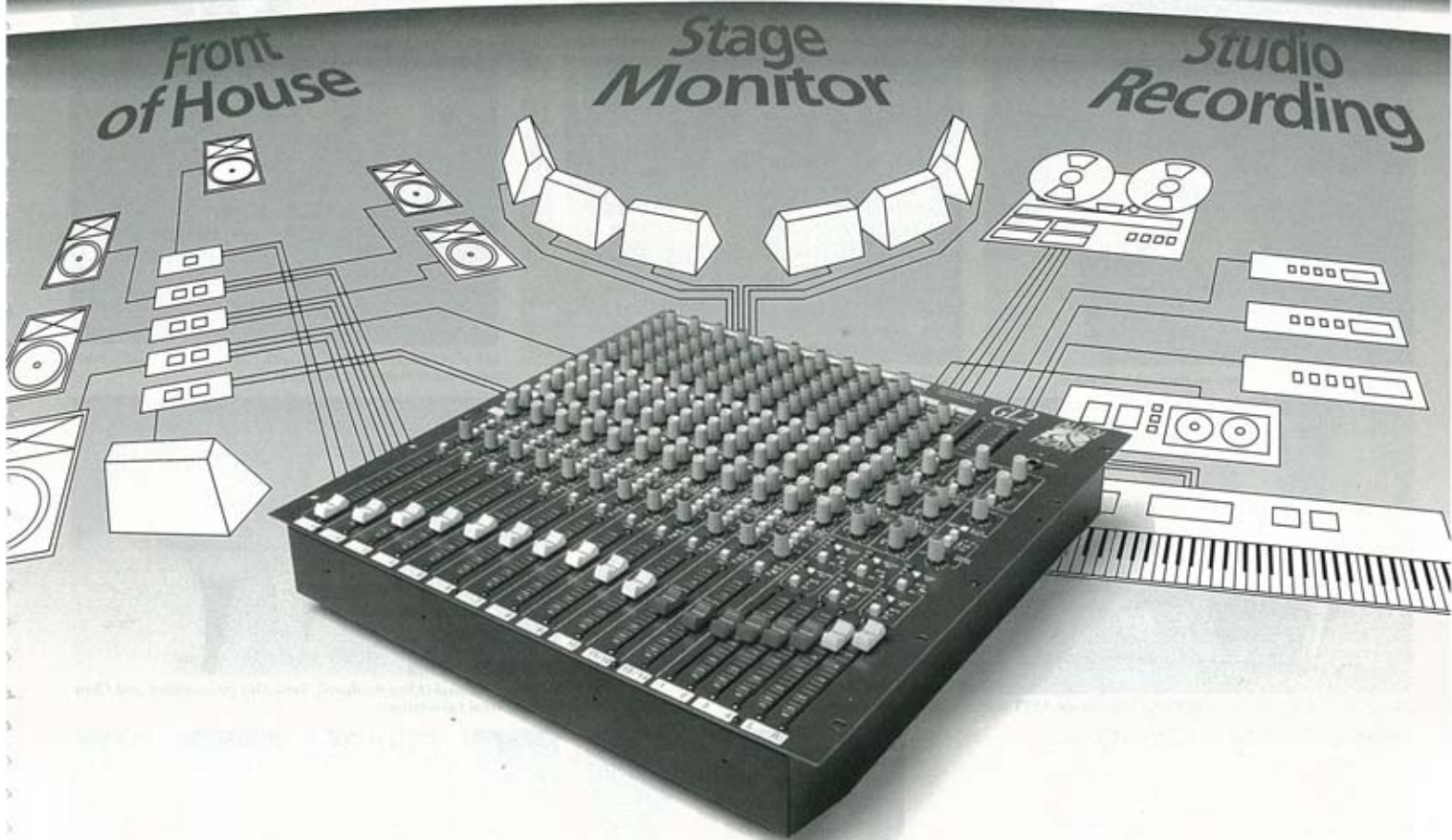
HW International was showing the latest in Shure wired and wireless mics, plus mixers from UK manufacturer 3G. The 3G Mynah Si is a 10-channel mixer with two stereo input channels that can be used for record decks, CDs or stereo keyboards. Showing in prototype form was the HP power amplifier, which has now been reduced to 3u in height.

Intimidation used some brutal visual images and rhetoric to promote Challenger 1, a DJ mixer with genuinely radical features. 'Kill' Switches activate very effective EQ cuts that can be used to remove the bass, middle or treble from a track. The result: it is much easier to place the vocals from one mix over another without the bass lines clashing. 'Slaughter Chamber' created what Intimidation calls 'a staggered signal'. The effect is a bit like transformation, but the difference is that the DJ can preset the rate to get precise synchronisation with the track beat. Challenger 1 is also fitted with an echo chamber, which can be used to treat the vocals once isolated by the Kill Switches. The company says that the pan controls can also be brought into play, leaving 'the vocals floating mysteriously around the venue'.

John Hornby Skewes, a distributor with a strong base in the MI market, was showing a line of equipment cases and some highly specified digital processing units from US manufacturer Digitech, which included the TSR-24 multi-effects unit with 24-bit processing. **Malcolm Hill Associates** (the company formed by one-time head of Hill Audio) had on show its incredibly compact Chameleon amplifiers. The range was started two years ago with the 2200S, a high-quality, high power unit aimed at recording studios. Its latest introduction is the smaller 1100S, which the company is targeting at the mobile DJ market. **KAM**, formed out of the Lamba Group of companies, and UK distributors for Stanton and Gemini, introduced two new additions to their own range of mixers, viz the new GMX-5 and GMX-7 rack mixers.

Marquee Audio was showing off the karaoke side of its business, as well as live touring. Its newly formed AV Entertainment division was allowing visitors to become instant pop stars. With some clever technology borrowed from professional broadcast industry, Marquee can take

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Planning ahead: David Manners and George Chapman of CCT.



Dale Ward of Vanco (US) with Zero 88's Freddy LLOYD.



Jack Schmidt of Strong with Lou Farina of Lycian.



John McPhail of ALS demos on the Coe-tech stand.



Full-time activity on the stand of Citronic.



Celco's Colin Whittaker (left) with Fons de Vreede and Gerard Jongerius of Flashlight (Holland).



Ken Smalley, Bob Anderson and Philip Edwards on ABTT duty.



Lightfactor Sales' Dick Carrier (right) with High End Intellibeams.



Jean-Luc Michaud (Alien Products), Tony Slee (Meteorlites) and Chris Cronin (Total Fabrications).



Alan Thomson (Theatre Projects), Tim Burnham (ARRI) and LD Durham Marengi.



Judy Jones-Vaughan and Daryl Vaughan (right) of Syncrolite Europe with technician Sam Harden.



Joe Aveline and Graham Walne (representing AETTI) on the L+SI stand with Barry Howse.



Jon Petts and Mike Wood of JEM.



Andy Trevett of Doughty Engineering with Bill Graham, technical director of the ICC, Birmingham.



Into focus on the stand of Primarc.



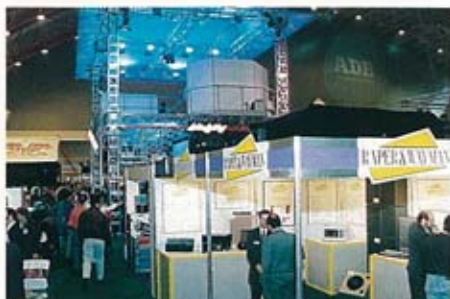
The popular seminar on automated luminaires in session.



Gordon Pearlman of Entertainment Technology (USA) with Tom Young of Hoffend & Sons (USA).



Primary Colours with their lighting filters for film, TV and theatre use.



New at PLASA: Raper & Wayman.



The Wharfedale display.

karaoke one step further, producing a video of the singer, complete with electronically generated backgrounds and other special effects.

Roland UK, sharing a stand with distributor **Soundivision**, was promoting the DJ-70 sampling keyboard, which will hold as many as 31 samples at once and will function as a complete workstation for remixing or making dance tracks based on samples and loops. Smithfield Electronics was back after a three year absence from the Show with six new sound and lighting lines including Citronic and McGregor.

Vestax had a number of innovative audio products on demonstration, including the CD-11



Flying high: Turbosound.

twin CD player for DJs. One of those products that is so neat even non-DJs were saying they wanted one, the CD-11 seeks to overcome resistance to the CD format by providing vinyl-style open-topped players and speed controls with an intuitive touch. The price should be around £650. Among the mixers aimed at DJs, there was a Vestax unit designed with the help of New York jocks. The difference: it uses rotary pots instead of faders.

Longtime associates **Volt** and **Wembley** were featuring last year's joint development - the Spyder, with the former making its UK launch of the PS range of high performance drive units, and



Beyerdynamic, with Soundtracs to the fore.



The Fane and McKenzie product ranges.

the latter demonstrating '3D' audio using a BASE processor which gives enhanced 'binaural' spatial effects. The processor (also mentioned earlier by Tony Gottelier) has four controls which will move and mix left, right, near and wide without affecting equalization balance or low frequency centre imaging. With the greatly improved frequency responses and dynamics of today's sound systems, multi-channel or enhanced stereo reproduction could quite literally be the final dimension.

Simon Croft

A full report on the sound seminars which took place during the PLASA Show will appear in our November issue.

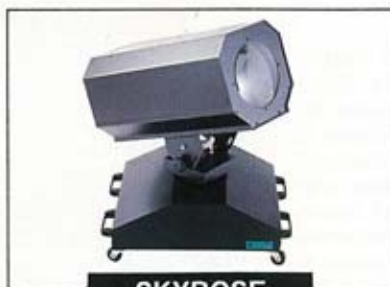


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From lighting control to fireworks via cases, dichroics and lasers . . .

Celco had a banner to point you in the right direction, and neat rows of Parcans to play with via their full range of control consoles, including the Aviator range. Personality cards for Navigator now include Clay Paky's Golden and SuperScans and High End's Intellabeam, with more being added on a regular basis.

After sharing a stand with Apogee last year, **Syncrolite International** went out on their own with a very smart scenic stand, under the control of Daryl and Judy Vaughan. Product-wise, the company has made a number of improvements to their Mini-Arc IISA spotlight, including a new douser/strobe assembly, and a custom dichroic colour option. They also previewed the Mini-Arc IWA washlight which shares the same housing and light source as the SA (an Osram HTI 600W), but has a broader wash beam and colour cross-fade feature. These units were under the control of a Synchronics PC-controller or the Compulite Animator which has the Syncrolite protocol on board. A DMX translator box is available so that control can come within the grasp of any DMX console. Soon to come from the States is Syncrolite's SS7K automated searchlight which employs a 7,000W xenon source.

Osram themselves have extended their range of HMI lamps with the introduction of the 'Super Quiet' lamp. Ideal for daylight conditions, the Super Quiet ensures acoustical resonances are minimal while meeting the demand of flicker-free light. In double or single-ended versions only, the lamp is available from 125W to 1800W. Osram also showed their Xenon arc lamp with integral reflector which combines the benefits of XBO lamps with a cold white light for fibre optic illumination.

Mico Lighting, who make light of the fact that they hold around four million lamps in around 5,000 variations, had a few on show, just to make the usual point. They also had Helvar Vision and Mimo dimming equipment.

Another lamp specialist present was **MGC Lamps Ltd** of Ipswich. The company holds 1,000 different lamp types and exports to no less than 70 countries. Their 60-page lamp reference book was available on stand.

In addition to their new Pencil Fogger, mentioned earlier by Robert Halliday, **Rosco** launched the Omega XT, a high output fog machine designed to offer a high degree of control. A range of systems have been developed which enable the Omega to interface with DMX512 or analogue lighting control boards, with a MIDI version also promised. Compressed air can be integrated with the fluid system to further enhance the ranges of output. Rosco's fine line in things other than fog continues with enhancements to their Supersat paint ranges, new



The new Omega-XT from Rosco.

optical film, a revised gobo catalogue and additions to the Supergel range of colours.

The Dicro colour filter range from **Ocli Optical Coatings** now offers lighting manufacturers ever more possibilities for controlling light and colour. No fewer than 46 standard colours make up the range including the new-for-1993 Dicro RX range which is specially designed for optimum performance in the reflective mode. The company also offers a full consulting and design service.

Vinten Electro Optics of Leicester showed their range of FX dichroic filters and introduced their new family of 'Laser Power' hot and cold mirrors. The company have been manufacturing and supplying their dichroic filters for industrial and military applications since the early days of colour TV cameras and the first camera optical systems to be made were, in fact, designed and produced by the present-day technical team now responsible for the manufacture of FX dichroic filters at the company's advanced coating facility based in Leicester.



Iain Price-Smith in control for Multiform.

New to the PLASA Show were **Primary Colours**, who specialise in filters for film, TV and theatre use. Formed just 18 months ago, the company was on the look-out for more international distributors to add to its already extensive list.

A representative range of Sachtler products was shown on the stand of **Optex** including the new 'Reporter' 200DI fixture, which had its official release at the Show. Based on the established Reporter 125, which utilizes the smallest HMI bulb currently available, the R200DI is slightly larger than its progenitor, due to an enlarged reflector to optimise the performance of the 200W MSR source. The R200 still provides a 1:5 focusing range, giving a tight 'peaky' spot through to a flat even field. A major development is the incorporation of Sachtler's new patented solid state igniter system. Optex also launched for Sachtler a new ballast system, the Batronic 2, which is capable of driving the trio of R125, R200 and R270, whether equipped with the new 'noiseless' igniters or not.

DeSisti Lighting impressed with the brand new power-saving Magis 300, 500 and 650W tungsten fresnels, the 1,000W tungsten soft Wyeth, the 200 and 200/400W daylight soft Raffaello and the 200W daylight Rembrandt fresnel. They also launched the mind-blowing 2,500/4,000W Remington par which has already made its mark in the USA. And we're told there's more to come at LDI in Orlando in November.

Shown by **Pani** of Austria was their new 2,500W halogen scenic projector with condenser system, an up-grade kit for their BP4 HMI projector (with cold light mirror), an optional mounting base for the BP2.5 compact, and an exciting new image making tool in the AS-100 Image-Scroller.

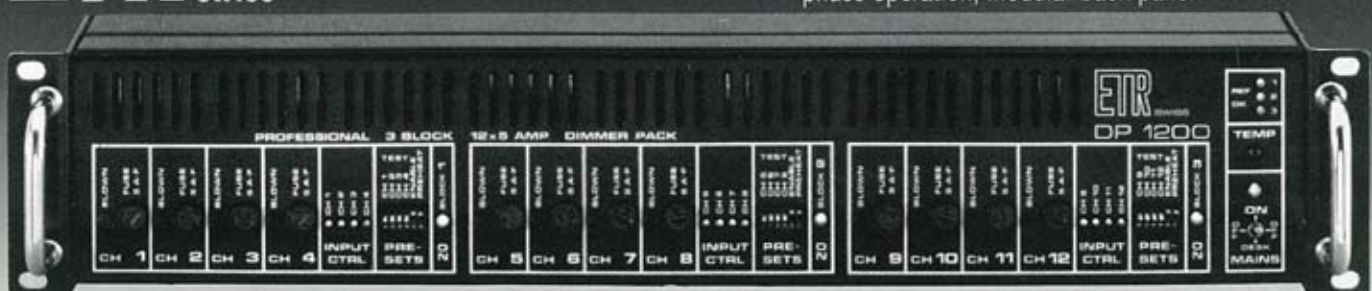
Howard Eaton is the man from Sussex who does amazing things behind the scenes at practically all the big West End shows. Anything you want that's 'tricky' in technical theatre terms he can do. New bits at PLASA included 'Softcue' memory cue light system and a dual fibre optic light source.

Also from deep rural Sussex was Multiform Lighting, who exhibited as the **Multiform Technology Group**. Now the 'Performing Technology Group' (and don't forget boss Iain Price-Smith is an accomplished performer in his own right), the presentation was a network of Sussex-based entertainment technology equipment manufacturers. So we had Multiform itself showing stage lighting control systems, dimmers, slave packs and strobes; MEC Systems with aluminium structures and rigging; and The Effects Co with machines for dry ice, fog and confetti. In order, Multiform launched their Masterpac 610 and Zodiac 36, MEC released their MEC Rack, and The Effects Co had the new Mini 500, Turbo 500 and Supersmoke 1,000 MkII version.

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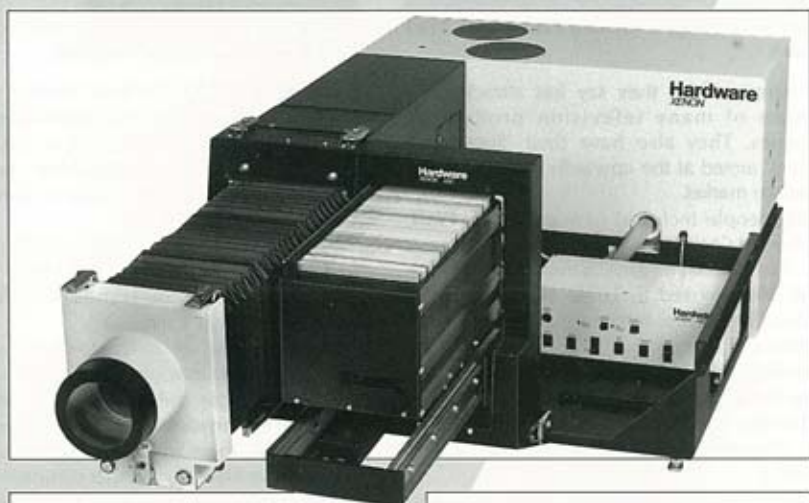


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Strong's followspots atop A C Lighting.



Glyn O'Donoghue, Debbie Potter, Caitlin Cundell and Nic Tolkein of A C Lighting.

Light Processor have extended their Q range with the QDMX 24 channel demultiplexer and the Q-Pack 5, a three-channel 25 amps per channel big brother to their successful range of 10 amp dimmers. Star, as usual, with Graham Norman in charge, was their now well-established Integrator controller.

The PLASA Light & Sound Show steadily expands its base of interest, and this show was no exception, with attendant showbiz engineering well to the fore. The cabling, lifting, handling, staging, scenic, tracking, trussing, screen and curtain companies are now attending the event in force, and apart from seating (theatrical, I mean), there is little you can't find at Earls Court 2.

Oskar Lapp, who have supplied cables to the industry for several years, are now selling direct offering a custom-made cable service for the stage lighting and entertainment industry. They expect to achieve a 24-hour turn-around from their bases in London and Warrington.

Penn Fabrications featured their System 2000 truss, which has been designed and engineered to fill the needs of sales and hire companies who require an 'engineered' look like Thomas or Tomcat, but do not have the same loading requirements. The system has been developed to accommodate up to 40' x 40' spans allowing up to a 20' trim.

Gerriets, the drapes, cloths and screen people, were again in evidence, and with them, as usual, were **Triple E Engineering**. Where one goes, the other seems to track after. The latest news from Triple E is that they are supplying the scenery automation system for the Vienna production of Kiss of the Spider Woman and that they are to distribute a new range of castors exclusively to the theatre industry.

Harkness Screens also had loads and loads of machinery. Here you could also track it and raise and lower it too. If you couldn't PC control it, you could at least radio control it. In other words, if you have or were looking for a screen or curtain you wanted to move, they'll sort out the system.

Another company leading in the field of curtains and drapes is **Playlight** of Manchester, and they have equipment across the board for TV, film, theatre and any type of presentation work. The company is exceptionally strong on complete solutions, including design, supply and installation of lighting, sound and drapes.

Technical Support Group came up with a new 'slider', now involving different coloured and



Ian Hill of Illusion (left) hands over a cheque for an Avolites' Sapphire to Steve Warren. The desk is to be exported to the Ukraine following the PLASA mission.



Lighting Technology's Richard Harris with Fred Bentham.

sized lamps, which they say has attracted the attention of many television production companies. They also have their 'Speedeeze Surround' aimed at the upwardly mobile DJ and conference market.

Lifting people included new exhibitors **Pfaff**, who showed CM (Columbus McKinnon) Lodestar hoist motors. As already announced in this journal, Pfaff moved to larger premises in the Wirral earlier this year and now have a major stock of motors and spare parts.

Euro Materials Handling, exclusive UK agents for the French Verlinde equipment, gave a UK debut for the new 'Litachain Li' range of climbing hoists. They are capable of 40m lifts from 250kg to 2000kg.

Holding things up, rather than hanging them, were **Doughty Engineering**. Detailed evidence of their products was provided in our September



Bob Hall of Anytronics (left) in usual mode.



The EMS modular 19" rack case from CP Cases.



Paul Ward of Network (right) shows the new Nexo PS15 to Kevin Hilton of Pro Sound News.



Markku Saarinen of Verlinde (left) with Roger Pates of Euro Materials Handling.

issue, but highlight was their 'product launch of the year' with the Easydeck system for temporary staging. There was a lot else too, on a stand full of interesting gadgetry. **Powerdrive**, as always, showed part of their large range of stands on the Cerebrum Lighting exhibit.

Holding music up is the job of **RAT**, and they had their latest addition to the range including fold-up and budget stands in addition to illuminated opera stands.

Holding things in, in the form of cases of all kinds, was the role of five exhibitors. Longest standing of these is **ADDA Super Cases**. Their cases are now made in extra tough polypropylene and they say there will be no going back to fibre once you've tried them! Other companies offering products in this sector included **Autopia Terakat** (second time round at PLASA), **CP Cases** (with an expanding 19" rack-case), **Trifibre** (already into polypropylene) and **5 Star Cases** (a wide range, from Liteflight to Tour Grade). **Red X** launched themselves at the Show as the UK's newest case and cabinet hardware company, and had products from Protex, Fliteware, Lemo and Neutrik.

Revolving things around were **Laserpoint**. As you will have noted from one of our pictures within this feature, a 3 x 3 Ramwall monitor system was on a continual 360 degree revolve, 4m above the stand floor. The electronics and source machine were placed behind the circling wall. Not satisfied simply with that, the company launched Ribbonwall, which demonstrated how a system comprised of different types of monitors can still display excellent graphics.

Several laser companies were in evidence at PLASA, so we offer a 'braille' review for anyone sufficiently visually challenged to have missed them. **Cambridge Lasers**, who shared a stand with **London Laser**, launched their own 2W mixed gas laser called Spectrum. A useful feature, of what must be the first British-made and designed commercial laser, is the single phase power supply.

Horizon Laser Graphics, are perhaps best known for their laser show productions, such as the Greenwich Meridian Show this year and the earlier Canary Wharf New Year spectacular, which sadly foreshadowed the collapse of that building's financial structure. Horizon were one of the eight exhibitors in the PLASA pavilion and reported excellent contacts from a range of overseas countries from the Ukraine to China. They showed the SpectraPhysics Spinnaker laser, which boasts a built-in water cooling system and

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Abstract showed a range of new effects including the Saga and Monstermoon Mk II.



Business is brisk in the Elect Club.



B&K Braun showed a wide range of effects lighting.



Jon Reay-Young of DeSisti (right) in demo-mode.



Robert Nesbitt (right) talked to Graham Walne about his life's work in the industry at a special PLASA Seminar.



PLASA Chairman Tony Kingsley (left) with Keith Isaac of Squire.



Louise Melton and Mike Henden of Leisuretec Distribution with Peter James of HW International (right).



Clean white lines for Osram's range of lamps.



Par Opti's fibre-optic emporium.

single phase supply in association with a Corel Draw graphics package.

Laser Grafix Sales & Hire, who were another first time exhibitor in their own right, were delighted with the Show, and especially the TV special in Spain which they picked up as a direct result of their participation. They also gave us the latest in their remote laser technology using fibre optics. Called Cyclops, and based on the Clay Paky compact driven light Pinscan, it was driven from a Spinnaker with their Prisma controller.

Laser Innovations are specialists in laser control, which they demonstrated with a techno-remix called 'Phantom of the Opera', using their triple scan 'Mirage' system triggered by SMPTE. The company, whose systems are based on PC-compatible software, have recently obtained American PVA approval and set-up an eponymous corporation there. They also report the completion of a sale to the University of Greece, where a twin Mirage system is to be used to promote cultural awareness.

Laser Studio, the new face of the irrepressible Geoff Jones, made an appearance on the Coe-tech stand with an accessible product called Stingray. Available in three models of 25, 40 or 60mW, this red-only effects package offers 64 built-in effects. **London Laser** launched their solid-state polychromatic colour modulator, which offers super-fast colour switching and blanking. They report a high level of interest in the retrofit value of this product for existing installations and equipment, mainly from abroad.

Abstract Design to Light, whose stand is always lively, to say the least, showed several new discotheque lighting effects including Saga, a

budget multi-head effect, the Monstermoon MkII version with two-stepper motor and controllable via DMX512 or dedicated controller and Futurescan, which incorporates sound activated gobos and a strobe effect.

Selling into the same field, **CLASS Ltd** came up with Smoke Gun, which features radio remote control, a very short start-up time and uninterrupted emission. They also showed their new Tower Power 400 watt Mosfet amplifier, while their Stunflash units did the eye blasting.

Fabtronic Lighting showed no less than 27 of their lighting effects units, covering everything from pinspots and scanners to helicopters and harvesters. Sheet steel specialists Henderson Fabrications, the parent company of Fabtronic, were also represented.

Back at the Show after three years' absence, **Smithfield Electronics** showed six new ranges. Launched into the UK were COEF of Italy with Astro, Eli and Tunnel plus intelligent dichroic colour changers in Elliscan and Plus 2. The Mastershow 9 is a small programmable lighting console. Given products included the new 2000W spot and followspot. SLE launched their new HMI 575 range upgrading the Moonflower II, while demonstrating the new Viper 1500 strobe, and Bull - which carries a range of single or multiple gobo units with colours, and Stingray. On stand from Newstat (the former Satel) was the Swivel, an intelligent effect that seems to do very nicely without a mirror. A dedicated DJ area on the stand was showing the Technotronics range of light effects, foremost amongst which is the new Technostat, which simply replaces the Par 36 bulb in pin spots, helicopters, scanners, in fact anything

that uses a Par 36, giving 20 focusable beams of light via pure dichroic mirrors. Completing the line-up on Smithfield, were Eurotap stock control software, the Logo-X-Press image light and Tek loudspeakers.

Having manufactured lighting equipment and smoke machines for various wholesalers, **JPS Lighting** used PLASA to launch their new Turbo-Fog unit, which is designed for both nightclub and security use.

Uni-Par Lighting from the US manufacture those highly colourful (plus clear) thermo-plastic Pars that we first featured in one of our LDI reports around three years back. They are now available in three sizes and no end of colours for various lamps, the latest being the UP-3 for Par 20 or MR16 lamps.

Anytronics have been regulars at the Show for many years. New products on stand included a 12-channel two-preset manual lighting desk, the Aurora 12, alongside its baby brother Aurora 6, a restyled version of the six channel, two preset Minidesk, the introduction of Series 193 dimmers, and additions to the Series 192 range.

Ryger's range of lighting controllers was featured in our pre-Show issue (September), and included no less than 10 new low-voltage touchpad controllers. Also new was their Challenger 250, an inexpensive but advanced x-y scanner. All moving parts are controlled by stepper motors and the mirror is externally silvered to give a sharper gobo image. The light source is a 250 watt halogen lamp which can be dimmer or shuttered to produce strobe effects. It can be used stand-alone with four music settings or controlled externally by either 0-10 volt controls or via an

RS232/V24 interface from a Ryger touch controller or any PC compatible computer.

From Germany, **B&K Braun** had their own range on demonstration plus products from Easytec, Varytec, Alutec and Laserstar products, all included in a massive 120-page catalogue. **Stiers** of Munich let their UK subsidiary take the strain at PLASA, with the launch of its flexible electroluminescent tape, a low-cost robot controller, expandable 16 channel memory controller and new DMX kit.

Leading installation company **Envotech**, with Brian Puckey in charge, were another first-time exhibitor at the Show. Based at Saffron Walden they have a wide range of design and installation work to their credit from PA and CCTV at the Old Royal Observatory at Greenwich through to sound and lighting for the futuristic glass building of the Chalon Court Hotel at St. Helens.

Also new, and heavy into sales and installation, **JYG** shared with Wembley and Volt on a double-decker stand. One needn't say any more about this company than if you want something in the discotheque area, then they've got a logo for it on their advertising! Also on the same stand were effects products from YES.

Finishing our reports off, but not with a bang, are **Phoenix Firework Displays**, with their marketing man Clive Standley (ex-Avolites US) obviously happy to be back amongst his friends in the world of concert touring. Their client list includes major corporates across 20 years' experience, and work on various concerts.

John Offord



At the recent PLASA Show three pieces of Zero 88's new cabinet dimmer LTC were sold off the stand to one customer - Hugh Leslie of LHS, who will supply them to Nigel Longley of NDL for installation in the Elmhurst Ballet School, Camberley, Surrey. Pictured above is Nigel Longley with Zero 88's Paul Fowler (left).



Colour co-ordination from Batmink.



Trussing for little and large from Slick Systems and Mushroom Lighting.



Mainstage's Mike Sweetland dramatically tests the claims of Flamecheck.



Tom Thom and Nick Archdale with Flying Pig's fast-selling Wholehog console and their two awards.



Peter Richards (left) and Luke Miller (right) of Rosco with Augusto Andraghetti of Spotlight.



Dave Winfield (second from left) talks pyrotechnics on the Le Maitre stand.



Marquee Audio had a host of names on stand including Soundcraft, JBL, Denon and BSS.




Paul Dodd (bottom left) set to run the Avitec lightshow.



Griven's stand featured a new line of discotheque effects lighting.

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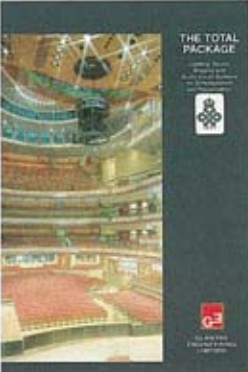
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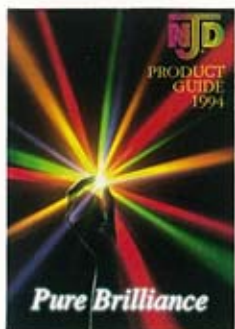
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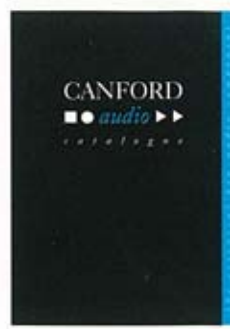
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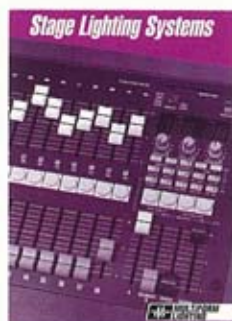
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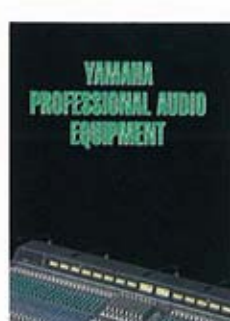
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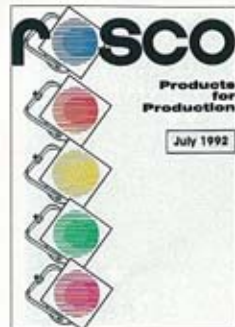
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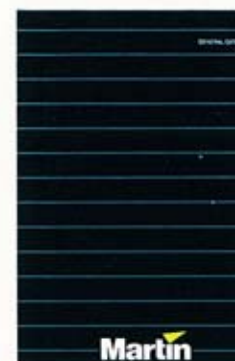
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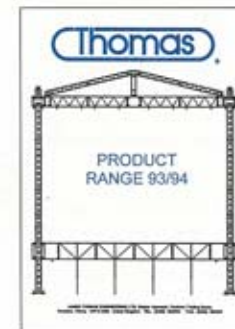
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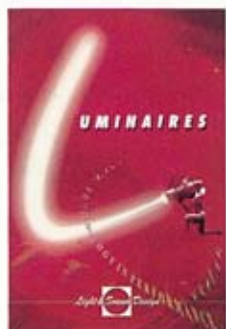
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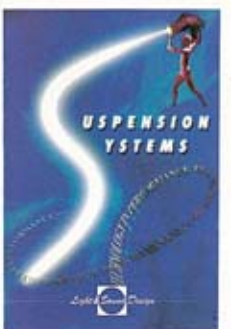
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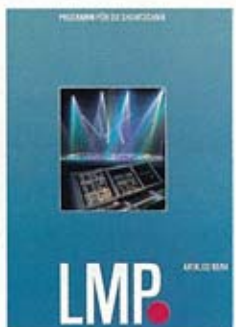
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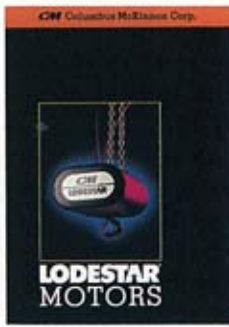
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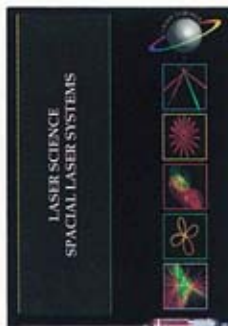
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THE RECYCLED TELEVISION STUDIO

Bob Anderson attends the re-opening of TC6

Despite ever increasing competition, despite Government threats of privatisation, despite press reports that staff morale is at its lowest ebb ever, despite rocketing prices and a fixed licence fee, BBC Television is still flourishing and still determined to continue with its duty to serve the viewing public and, above all, to continue to make and broadcast quality programmes. Most are made at Television Centre in London where some 10 studios of varying sizes are available, and organised into a comprehensive television factory. TVC first opened way back in 1960 and, like all factories, has grown and altered in response to the demands made on it. A regular routine of refurbishment deals with each studio in turn on a ten to 15 year cycle. Two years ago the largest studio, the 10,000sq.ft TC1, was re-equipped. In 1992/3 it was the turn of the 8,000sq.ft TC6. L+SI was invited to report on the re-opening.

Producer Choice

The modern BBC is a severely cost-conscious organisation, but enthusiastically and professionally eager to accept the challenge of the new strategic policy embodied in the expression 'Producer Choice'. Producer Choice means that the creative teams making programmes for the BBC can buy their resources in the open market. In the old days administrators allocated a BBC studio for each programme, and a notional standard cost was automatically deducted from the producer's budget. Now the producer can compare the costs of all available studios, electronic or video, both inside and outside the BBC, and choose the best suited to production needs. As a consequence, the managers of TCS have to make their facilities as attractive as possible so that they can compete effectively in price, and so make a fair return on capital expenditure. TC6 is the first studio to be renovated under these considerations.

The Problems

One very important job had to be tackled immediately. Fire protection containing asbestos had to be removed safely. Then decisions had to be made about new technology. The BBC broadcasts in the PAL analogue 625 colour system with NICAM stereo sound, but wide screen and digital standards may be authorised before too long, so should they be anticipated?

Digital techniques are also becoming available for many other purposes offering improved reliability and stability, hence reducing the maintenance load. So, should these be considered? Lighting control has used digital techniques since 1968 but would the extra cost of digital dimmers make sense? Motorised scenery and lighting rigging systems have long proved their worth but needed safety improvements and overhaul unless something better could be found.

Decisions

The BBC is very experienced in answering the unanswerable. Consultation with production staff suggested objectives. Then,



The lighting and vision control room in TC6: the Galaxy console is at the right with the channel mimic and BBC studio mimic monitors above and optional Pulsar effects control on the side desk. The lighting director sits at the central position with vision balance operator and system engineer at his left.



TC6 - in full working order.



All systems go.

comparative cost analyses, reliability predictions, work scheduling forecasts and many other factors all had to be combined to produce an acceptable action plan, a budget, and an opening date. Some of the decisions that may be of interest to L+SI readers were as follows:

The video system uses serial digital technology for quality and reliability - a significant step into the future. Six Thomson Sportcam CCD Cameras, and a 24-channel Thomson digital mixer are the core of the picture origination system, supported by a dual-channel Questech Charisma Digital Video Effects unit with Cleo Option 3, a Rank Cintel Slide File and an Aston caption generator. Pictures are monitored after conversion to PAL format and recorded on local Panasonic D3 video recorders backed by S-VHS machines. All monitors in the production control room are colour.

The audio system is a Calrec Q Stereo 60/8 analogue mixer, digital technology being too expensive here. Lighting control is fully digital using DMX to link a Strand Galaxy Nova to ADB digital dimmers, saving some 2,000 wires between control and dimmer rooms. The luminaires and hoists remain as before, offering proven facilities standard at TVC, but were thoroughly reconditioned. Audience seating is based on a construction kit system, rigged to meet each requirement. The studio control rooms, usually on a floor above the studio in the BBC, were moved to the ground floor. A self levelling resin was used for the studio floor.

The Lighting Rig

The BBC has always embraced the need to provide studio lighting to the highest standards. Lighting directors are well trained and well paid and studio equipment is of the highest quality. The saturation rigging system - special pole operated multi-purpose luminaires permanently rigged in every position that they may be needed - was long ago proved to make good artistic and financial sense.

No surprise then to find that the existing 202 short motorised lighting hoists and 96 scenery hook winches were retained and that renovation to replace worn parts, carried out by Metreel of Nottingham, was found sufficient. The controls, already fitted with overload and slack rope protection, now send indication of these faults to the control panel to speed remedial action. The 188 multi-purpose luminaires (the Lee-Colortran version) and an allocation of more specialised lamps were also renovated, this time in-house. Age, and the complications of removing asbestos and replacing acoustic treatment required replacement of all studio wiring.

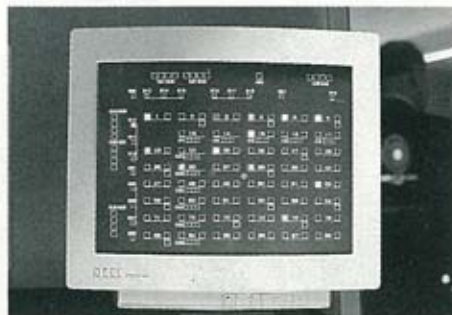
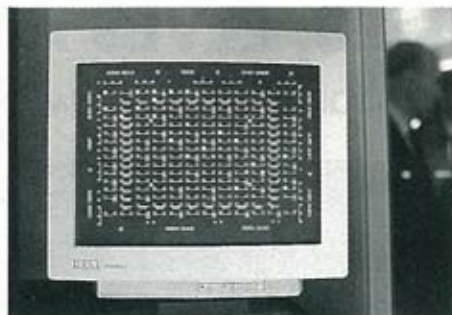
Dimmers

The essence of the saturation rig is that every lamp should be instantly available and adjustable. No time should be wasted in repatching or finding extension leads. Each of the 202 motorised lighting hoists has a circuit for its multi-purpose lamp and two more for add-ons. Then add generous wall sockets for cyc lighting and specials and you need 648 dimmers. The BBC specified digital dimmers to take advantage of reliability and fault reporting and ADB offered their Eurodim 2 system to win the contract.

Eurodim dimmers accept DMX data and fire the thyristors without intermediate analogue conversion. Duplicate DMX inputs and decoding, built-in multi preset back-up, a wide choice of dimmer laws, partial mains compensation, broadcast quality filtering, residual current detection and plug-in dimmer modules are provided. In addition, micro-processors in the dimmer racks monitor supply voltage, phase current, dimmer load current, circuit breaker trip and rack temperature and report to the control desk and to a dimmer room data logging computer which analyses and keeps records of all faults.

Lighting Control

The chosen installed control system is a Strand Galaxy Nova, following a long history of satisfactory use of Galaxys elsewhere at TVC. The Nova offers all the usual Galaxy facilities, including integral back-up and control of



The electronic studio mimic: The DMX Data Display (top) developed by the BBC development group for a PC486 computer, shows all the 648 dimmed sockets in the studio. Each 'square' can show five states of brightness or warn of a dimmer fault. Diamonds show houselights. To increase clarity the operator can zoom in on any quarter of the display as shown below.

colour scrollers. Output is on two DMX cables each handling about half the dimmers. To allow flexibility, and because other types of control boards can offer advantages for chases, effects and pop-lighting, there is space in the control room for locating up to three portable effects boards alongside the Galaxy operator. Two more DMX cables connect these to the dimmers where the outputs are combined on highest precedence logic. To simplify operation a 3x2x512 LSC Softlink DMX patch unit allows renumbering of the add-on controls to match the studio system. This also provides back-up for the main data links. The DMX system can also be patched to sockets on selected hoists in the studio to control moving lights and other DMX protocol effects direct from the control room.

A notable innovation pioneered in TC6 is replacement of the traditional BBC mimic diagram with a VDT display giving the same information. It can be disorientating working in a control room with no view of the studio lamps and effects, other than through the cameras, so the BBC long ago decided to fit a scale plan of

the studio near the console with a pilot lamp for every dimmed socket so that the lighting team could see at a glance which lights were on and where, and their approximate brightness. This required thousands of lamps and wires and, to be readable, the mimic had to be 1m or more square. In TC6 BBC software designers have provided a system to replace this with a high quality colour VDT graphic presentation showing the same information obtained from the DMX link, plus fault status. This locates alongside the Galaxy monitor. Digital data about lamp brightness is returned from the dimmers and kept in step with the lighting operation. Warnings of faults are updated every eight seconds and full details can be accessed either on a fault status page, or on a similar display in the dimmer room or on a paper print out.

Another BBC TC6 innovation is to link the Strand Galaxy hand-held remote control to the lighting designers radio talkback instead of using the less reliable infra-red system. The lighting director can now choose whether to use speech to ask the console assistant to make adjustments, or to take direct control, or both at once, since the system automatically separates speech from data.

Comfort

Essential to the Producer Choice concept is that one aspect affecting this decision will be that they will want a pleasant, as well as an efficient environment. This was one reason for moving the control suite to studio floor level. The previous route up and down the studio stairs wasted time and was very tiring for those, like the lighting director, who had to make the journey dozens of times a day. The new control suite, the usual separate production, sound, and lighting and vision rooms are spacious, ergonomically laid out and pleasantly decorated in a modern commercial style.

Credits


After much re-organisation recently, BBC television now runs its own affairs and this includes project management and engineering: Television Engineering and Project Services is a 'fully trading business unit within the BBC internal market'. All work in TC6 was co-ordinated by this team, together with BBC Building Design and Management Services who provided the Project Architect, Environmental Services Consultant and Building Works Supervisor. Philip Drake Electronics was chosen for the installation of the serial digital component vision system and Calrec for the audio and communications. ADB and Strand Lighting carried out the lighting contract.



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EFTELING - FAIRIES, ELVES AND MINUETTES

John Offord visits Holland's award-winning theme park

When one distributor buys in theatre lanterns by the hundred on a regular basis, manufacturers take note. And after rubbing their hands together in shameless satisfaction, they start to question where their products are actually ending up.

CCT Lighting's joint managing director David Manners reckoned he'd found out where a lot of his theatre lighting was going, and he invited me along on an overnight trip to Holland to assist in the tracking down of no less than 1,600 Minuette luminaires that had disappeared into the woods around Breda. We were assisted by the agent concerned who had bought the goods in question, namely Gerard Jongerius of Flashlight in Utrecht, the man who held all the clues as to the whereabouts of the lighting armoury involved.

Efteling promotes itself as a world full of wonders, and Europe's best-loved enchanted park. (It could in fact claim more: 20 years after having the Pomme D'Or fall into its lap for its contribution to tourism and recreation, a jury decided unanimously to crown Efteling with the Applause Award, an accolade given to the best amusement park in the world. In fact the jury were so impressed with the facility that they did literally break into spontaneous applause). Set amongst lush woodland, it opened in the fifties as a Fairy Tale park, and the experience given to visitors remains firmly rooted in childhood stories. Its size and range of attractions has grown steadily, year on year, as has its reliance on increasingly sophisticated technical hardware.

For seasoned theme park visitors, it must seem like a breath of fresh air. In total contrast to the competition it relies not on the brash, but on the understated, with the 'Blackpool' feel of Alton Towers to be found only at the old steam Merry-Go-Round Palace with its 1895 carousel in pride of place. The Magic Kingdom at



First thing on every child's wish list - the fairy tale castle of the princess.

Euro-Disney may to many visitors feel like little America in a foreign country, but Efteling fits effortlessly into its surroundings and feels comfortable and at home in its enchanted wood. You can have your splash of excitement, but the overall impression is of a wide degree of choice, relaxation if you want it, and considerable attention to detail.

Having said that it is also a park of sublime contrasts. Turkish, Indian and Moorish architecture nestles a little uneasily amongst

the trees, and occasionally one comes across the bizarre sight of a huge pagoda spinning skywards on a lolly stick. And yet it also seems in keeping somehow - after all its purpose is to leave the real world at the entrance gates.

After tasting some of the specialities, including the circulating pagoda and the grand roller coaster, we queue-jumped (with permission, of course) to find the homes of the missing lanterns.

The park has a trio of major dark rides, all superbly lit in theatre lighting style, and we found the missing Minuettes in use across all three attractions - a mixture of wide angle, profile, pebble convex and fresnel spotlights, all supplied and installed by Flashlight. In order to stand up to the arduous service demands of a theme park, all the units use long-life M38 or M40 lamps and colour is mainly by glass. As well as offering excellent optical performance, the Minuettes were also chosen for their proven longevity and ease of maintenance. (Flashlight carry out a major service during the annual shut-down period, cleaning and re-lamping the units).

I realised by now that the whole exercise of getting me to Holland was to take my mind off the forthcoming PLASA Light & Sound Show, and push me into a world of make-believe - a world where David Manners could play me with CCT logos by the hundred and amaze and delight me with a mass of simple, yet delightful scenic and animatronic techniques that the park's owners had employed in these concrete caverns of the imagination. After my trip to I Corsari in Italy (see L+S, January 1993 issue), I was obviously a sucker for punishment.

Needless to say I was impressed, and thoroughly enjoyed my day out. The first ride was for the little kids. 'Carnaval Festival'



If you go down to the woods today, you'll never believe your eyes . . .



If you go down to the woods today, you're in for a big surprise . . .

opened in 1984 and is a fairly standard 'trip-around-the-world' ride using travelling pods with animated tableaux of singing people, animals and scenery.

'Fata Morgana', which opened in 1986, is the forbidden city of the East and sits on the edge of a beautiful lake, in which serene surface its image is reflected. Once inside, riding in boats, the journey is straight out of Arabian Nights. David Manners told me that visiting this ride was his first experience of animatronics. "I was amazed. The bartering in the Souk, camels braying, passing a beggar who held out his hand calling 'baksheesh' and the portcullis thundering down after you have passed under it was so absorbing that I forgot to notice our lighting on the first ride! Seeing it again it had all the hallmarks of a professional lighting designer's work, combining the correct equipment properly focused, with an emotive feel to direction, colour and intensity. It was a delight."

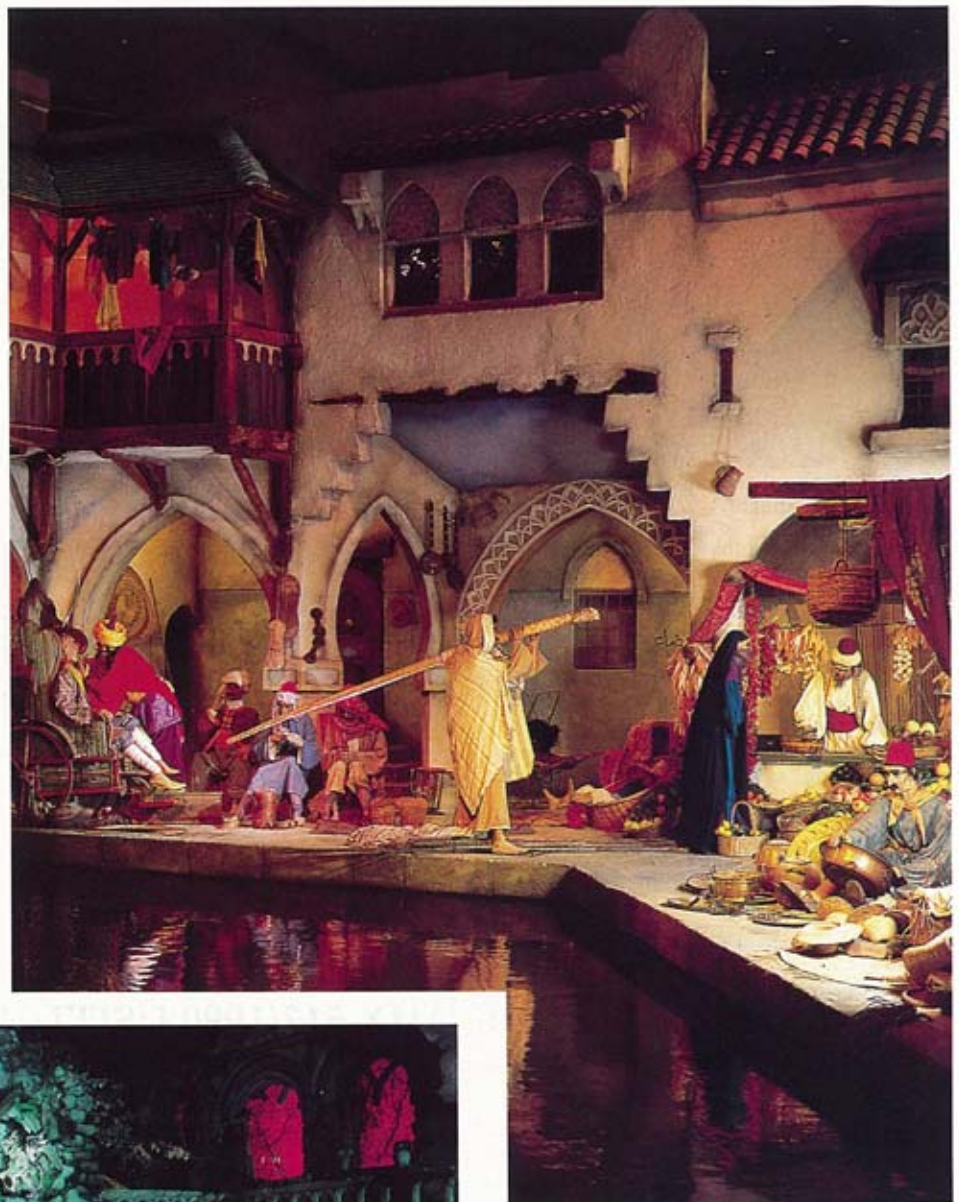
'Droomvlucht' (Dream Flight) is Efteling's newest attraction and was where we had to use our in-by-the-back-door influence to the full, in order to by-pass the huge queue. A series of gondolas carry the visitor through a fairy tale forest full of animatronic fairies, elves and trolls singing, admiring the flowers, or just generally lazing about. This ride is undoubtedly the most theatrical and the scenery and lighting create a truly make-believe world. There is so much happening within each 'set', and so much attention to detail that it would take at least half-a-dozen rides to take it all in.

"The most memorable part for me," said David Manners, "was entering a large garden area at tree-top level with a pond below, circling slowly, and then spiralling steadily down and onwards to the next scene. It reminded me of Alice in Wonderland."

There are two other particularly memorable settings in the ride, both featuring that popular fairy tale icon, the castle. One has mountain castles amidst heavy fog, and the second has them floating in the air, above a huge shimmering starcloth. "Once again the artists and technicians at Efteling have used their experience and the flexibility of performance lighting to make a highly dramatic impact."

The manager of special projects at Efteling is Alex Lemmens, who commenced his career at the theme park in 1975. Having originally trained as an electronics engineer, he joined as head of its technical department. Part of his role is to sell the park's expertise to other centres, and this service is offered world-wide by Wieland Schwarzkopf GmbH, who act as Efteling's representatives.

The essential skills developed at Efteling are centred around constructional techniques, animatronics, and scenic design including the attendant lighting and sound technology. The latter is of special interest to readers of L+SI and as Alex reminded me, "We are theatre as well! We have permanent stages as in the theatre, the only difference being that the set-up here isn't subject to the same variations. We have to build in a different way using real materials for permanency and safety. The necessary authorities are then able to give us permission



Fata Morgana: a traditional scene.



Scenic touch: dance macabre.

for special effects such as open fires and torches, etc."

Alex has seen most of the major London shows and is continuously on the look-out for new techniques. "Theatre has many special effects which can easily be reproduced in our field. However, we have to look for equipment that is capable of running continuously and we have to translate what we see at work in the theatre into what we can achieve here - we certainly learn a lot from it."

When it comes to installation and lighting design, Efteling relies on its links with Flashlight. "We do things together," said Lemmens. "Our creative director Ton van den Ven and his assistant Peter van Oostade work with Gerard Jongerius to make the 'picture' and light the sets. Gerard seems to know instinctively what Ton wants to achieve."

Leading Dutch composer Ruud Bosch, who is involved with several Dutch TV programmes, is the man regularly commissioned by Efteling

to work on the music. "He creates very original music," continued Lemmens, "and sits down with Ton to see what he's designed, and then comes to me to discuss how we can achieve things technically. In Dream Flight every scene has its own music, and it has to run fluently from one to the next."

In addition to being involved with the permanent rides, Flashlight have worked with the park on the special festivals held there since 1980. "Our director asked me if the park itself could be illuminated. I called in Gerard, and



The Troll King is a good example of the design and technical skills of Efteling. The King is an ingenious electronically powered robot, provided with self-developed precision engineering, which stages an impressive automated show 250 times a day, seven days a week. The picture above shows part of the internal workings of the animatronic.



Manager of special projects at Efteling, Alex Lemmens (left) with Gerard Jongerius of Flashlight.



Missing in action: David Manners of CCT Lighting finally tracks down his errant theatre lanterns in the woods of Southern Holland.

we did it together. I think we used every last spotlight from the Flashlight stock! Everything was here, and the festival drew a massive crowd of 25,000."

Since then, like all good things, it has grown to become a regular event in the calendar, runs for six days, and includes a variety of entertainments.

"The only way to do things well is to use theatre lighting," said Alex. "You can't do it with permanently installed equipment. Using theatre lanterns means that there is a risk of things not working in bad weather, but, if it looks as if it might rain in the evening, we switch on all the lighting in the afternoon. Once



One for the kids: a typical tableaux within the Carnaval Festival ride.

it's up and running the equipment remains warm and keeps itself dry."

Efteling provides us with an ideal example of the ever-growing market for our industry's equipment, and although lanterns were the centre of this particular story, there was obviously evidence of much else besides: I noted in passing Pulsar and King's Sound dimmers, for instance.

The visit also gave excellent evidence of how two PLASA members provided the vital links in the chain from manufacturer to distributor and on to end user, complete with a continuing maintenance contract. Not bad going - and all this for a bunch of fairies.

Notice of Launch of DMX 512/1990 USITT/PLASA Usage Project

As a result of the seminar on Control Transmission, held on 13th September at the PLASA Light and Sound Show, an important decision was taken - to launch a scheme to be provisionally titled:

USITT/PLASA DMX 512/1990 Usage Project

The objectives of the project will be:

- (a) To document and formalise the use of start codes alternative to NULL by setting up a world-wide register, administered jointly by PLASA and USITT. A list of the codes registered will be published and updated at regular intervals.
- (b) To formulate, agree, and circulate for comment a Recommended Practice for DMX Signal Distribution.
- (c) To study and report on a possible standard for talkback on the second DMX 512 data pair.

It is intended to make an early attack on the start code register, and two Registrars have already been appointed. These are Steve Terry of Production Arts Lighting for North America and the Pacific Rim, including Australia and New Zealand, and George Thompson of PLASA for Europe. Their addresses are:

Mr S Terry
 Production Arts Lighting
 35, Oxford Drive
 Moonachie NJ 07074
 Tel: 201-440 9224
 Fax: 201-440 2612

Mr G C Thompson
 1 Riverside Court
 Kislingbury
 Northampton NN7 4AF
 Tel: 0604 830860
 Fax: 0604 832178

To obtain the widest possible expertise needed to accomplish the outlined objectives above, a working group will be set up with Steve Terry as chairman and Peter Brooks of Zero 88 as UK liaison officer.

At the seminar a number of company representatives volunteered to assist this project, and the purpose of this notice is to invite all companies interested in any or all of the objectives to write to the Registrars by 31st October 1993 and state their interest. They will then be sent full details as soon as possible, which in the case of start code registration will be almost immediately. If companies are not sure whether they are already known to the Registrars, would they please check.

It is foreseen that as a result of tidying-up of the DMX 512/1990 standard, interested parties will also make themselves known to begin discussion on the need for, and format of, extended or new standards for data interchange.

LETTERS

Dear Editor,

Two Weeks in Francis Reid's Pocket

A report on the 1993 British Council's International Seminar on Theatre Lighting Design and Technology, September 1993.

Having been a theatre lighting designer for some years and now teaching the subject I was delighted to have my college fund, and be accepted for, a place on the British Council's third International Seminar on Theatre Lighting Design and Technology, organised and chaired by Francis Reid. No less than 21 people variously involved in lighting from all corners of the globe converged on Edinburgh for the first five days of the course to catch the tail-end of the International Festival then moved down to London for the remaining 10 days.

The course was a mix of lectures, discussions, site visits and shows. Professionals who shared their experiences and vision with us included Rick Fisher, Robert Ormbo, Dee Kyne, Iain Mackintosh, Martin Palmer, Jeanine Davis, Richard Bullimore, Jenny Cane, Tony Bond, Graham Walne, Tony Gottelier, John B Read, Mark Jonathan and many others, including the man himself, Francis Reid, who was living in the hotel with us and held

regular after-house discussion groups in the bar.

Having for years worked in splendid isolation as a designer because pressure of work and tour schedules, and having only limited contact with other professionals, as I suspect is the case for many of us, here was a chance to talk to the man who wrote the books, and the people with the experience, expertise and big budgets.

We saw many performances, Sunset Boulevard at the Adelphi in which the hydraulic engineers should have taken the curtain call, Sunset Song performed by Tag Theatre Company in a broad Scots accent in a venue with the acoustics of a ploughed field, which left certain international members of the course baffled, and The Jiving Lindy Hoppers doing Brecht in an Edinburgh gym which left us all baffled.

There were some good shows, Kurt Weill's Street Scene by the ENO, The Seagull at the Orange Tree and some of us watched Paul McCartney at Earls Court being strafed by low flying Telescans, whilst Linda's ankles were lit by a quaint little row of lava lamps.

Then, after being issued with pony tails, cell phones and silver briefcases we went to the PLASA Show to be told by every manufacturer that the

mirrors on their lights waggled, better, faster and with more feeling than anybody else's. There was even a kit with which you could make custom gobos of your aunt's budgie, usefully flight-cased so you could do it on a plane. In the discussion that followed Reid gently reminded us that lights are little more than tin cans with a lamp in, and it's what you do with them that ultimately counts.

The course was full of memorable moments: Iain Mackintosh, the theatre architect, covered in plaster dust 90 feet up scaffolding in the building site that was the Empire theatre in Edinburgh enthusing about louvred lighting slots. The chief at the Adelphi giving us graphic accounts of what happens when a Vari*Lite forgets what it is and what happens when you dial 999 on a Light Palette. David Bertenshaw, the R & D man from Strand, telling us about the microwave induction lamp, then admitting that performers may be a little wary of standing in front of what is, in effect, a working microwave oven with the door open.

Ultimately it was not the technology, however sexy, that was the heart of the course, it was the people. Both the guests who came to speak to us and the members of the course, professionals in their own countries, were the point of being there, meeting others who share a common love of lighting and the performing arts.

George Tarbuck
Queen Margaret College, Edinburgh

Didier Wins Zero 88's Grand Prix

The second Zero 88 Go-Kart Grand Prix was held during the PLASA Show. The previous event, held in 1991, proved so popular that Zero 88 decided to revive the International Challenge and invited a strong international field with 47 drivers and 70 spectators from all corners of the world.

The heats were full of thrills and spills with several drivers being 'yellow flagged' for ungentlemanly behaviour on the track. Ivano Burato of Coemar received three yellow flags, which technically banned him from further participation. However, loud protests to the marshalls that he was only driving 'Italian style' reinstated him to the semi-finals. David Catterall of Zero 88, and Ian Brown of Coe-Tech somehow managed to turn their karts completely over.

The field was finally reduced to eight finalists: Tor Tenden and Lars Berge from Norway; Peter Kemp from Australia; Michael Olsen from Denmark; Silvio Sceri from Malta; Alberto Herrera from Spain; Didier Courbe from Belgium; and last, but not least, the sole UK representative - Ruth Rossington, that well known lady journalist from L+S.

The final turned out to be a very exciting event, with all finalists very evenly matched. Didier Courbe started in third place on the grid, but with a brilliant manoeuvre dived between the leading two on the exit of the first bend, and never lost his position despite a spirited challenge from Lars Berge over the final three laps.

(The well-known lady from L+S finished in a highly commendable sixth place, equalling John Offord's performance in 1991!)



Oskar Lapp Winner

The winner of the 'Cable Weight' competition on the Lapp Cable stand was T Rix of T&C Partnership based in Cambridge. He guessed 403kg and the actual weight was 430.7kg. He wins a 21" Colour TV.

Ministry Mixing

Soundivision will be presenting the latest of their product demonstration exhibitions at the Ministry of Sound nightclub on October 17th. For further details contact Soundivision on 071-281 81 21.

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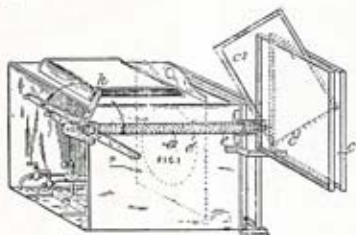
BRITISH THEATRICAL PATENTS 1801-1900

Introduction to Patent Abridgement 18623 of 1893 (E.S. Cooper)

'Being in the limelight' is very much a piece of contemporary jargon, though a hundred years back it was more likely to have its basis in reality and your followspot might well have been the real thing - a genuine limelight. Light generated by incandescent quicklime would be focused through a simple bullseye lens and whoever was at the receiving end would be truly in the limelight. When coloured light was required it was a simple matter to introduce a medium in front of the lens. Mediums were usually framed in wood or metal for sliding into place in grooves before the lamp housing where they sometimes jammed or were let fall by a less than careful operator. Cooper's patent semaphore colour change is an attempt to avoid all this by making the change simple, swift and smooth.

19,623. Cooper, E. S. O.S. 3.

Limelight apparatus.— Consists of an apparatus for operating the coloured glasses in front of limelights used for scenic and other effects. In the Figure the part marked A, B, C is a series of concentric tubes so arranged that any one of the coloured plates e^1, e^2, e^3 can be rotated so as to come in front of the light, by simply moving the corresponding handle of the series A. In a modification, the axes connecting the plates with their corresponding handles are in the form of parallel rods, instead of concentric tubes as above.



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FINNISH NATIONAL OPERA

Zenon Schoepe studies the sound in Helsinki's new opera house

Standing on the sixth floor at the very top of the new Finnish National Opera house among the light pulleys, the air conditioning and some curiously positioned junction boxes, and looking down between your feet through the wide lattice metal work that stops you plummeting down to the stage below, you realise you are perched on a building that currently represents the state of the art. Heading for an opening week at the end of November with *Swan Lake*, *Carmen* and the Finnish traditional opera *Kullervo*, the house has been breaking itself in gently over the last months with an emphasis on 'nothing too ambitious' to begin with as the operators acclimatize themselves to the new surroundings, technology and working practices.

It replaces the old Opera house of 125 years standing, which is being upgraded for smaller productions, and represents a total investment of around 1 billion Finnish Marks (about £125m) all in, with around £2m spent on the audio installation which was handled by leading Finnish pro-audio company MS Audiotron, as the biggest contract of its type in Finnish history. "In the bigger scheme of things it's still a pittance when you think that they probably spent more on the chairs," observes head of pro-audio at MS Audiotron, Jarmo Roivas. Built in true designer style - right down to those chairs, the polished stone floors, exotic woods and the fixtures - the Opera house employs 440 people and 1,000 in full season for the 1,400 capacity main hall, smaller 550 seater theatre and countless rehearsal rooms for dancers, choirs and musicians. It's beautiful but it's not been without its problems.

Questions have been asked why so expensive and so decadent a monument to the arts should be built at a time of recession and 20% unemployment. If the truth be known, had it been completed a year ago when circumstances were better most of Finland would have praised the way in which its taxes had been spent. But across the country it is still receiving quiet praise, for here is something that really puts Finland on the map culturally and technically. The project has been an on-going one to put it mildly, architectural designs were formulated as much as ten years ago which posed problems for the audio installation.

Firstly, the amplification and manipulation of the audio side was not defined in a venue which was designed to produce exemplary natural acoustic performance, and secondly, the march of technical progress would have



The new Finnish National Opera House in Helsinki.

rendered many of the ideas obsolete even if they had been designed in all those years ago. In order to bid for the contract MS Audiotron effectively had to plan the system accurately to gain some measure of its size. This was further complicated by very tight specs for some things, like an SPL of 120dB throughout the main auditorium, and less specific in others, such as the lack of stage manager's box and the convenient positioning of XLR sockets in ceilings and anywhere where they're hard to reach.

The design ethic can be taken too far at times: what has resulted is a classic example of forward thinking, true enlightenment and risk. The Opera employs an AMS Logic 2 digital console for the main auditorium FOH - the first such use of the desk. It also has a second Logic 2 installed in a recording studio in the basement - not a matter of great interest in this instance, but it's used to record playback source audio in an associated large orchestral recording area, performances from the halls, and it's also a place where sound effects can be created and manipulated in an LCR and Surround monitoring environment, to mimic the LCR and Surround sound system in the main auditorium.

"The intention throughout is that we convert a sound source once to digital and once back

into audio for the audience. Everything else in between is digital," says Kari Tiitinen, head of sound at the Opera. "Once in a lifetime you have an opportunity to buy technology that is leading edge and the Logic 2 consoles were it. The loudspeakers are small and easily replaced by comparison to the Logic, which is the heart and sets the quality for the whole system."

Main Stage

The main stage uses an ingenious system of hoists, seven side stage wagons, stage elevators and platforms and a rear stage wagon with an integrated turntable to completely reconfigure sets quickly and silently. Built by Krupp in Germany, the giant machinery is housed in a basement below the stage at least as high as the auditorium itself. The incredible array of high tech ironwork would not look out of place in a sci-fi film and a lot of attention was paid to sound proofing and insulating mechanical parts to make them as quiet as possible.

The stage area has its own playback system for performer monitoring purposes, as well as for the delivery of positioned sound effects. The system is entirely ElectroVoice and employs HB series horns strung in among the lighting gear for narrow beam artiste monitoring, the model chosen depending on the specific application and the Q required with each positioned



Main auditorium showing rear surround speakers.



Full house at the Finnish National Opera - note control room window at rear.

according to the performance. The importance of the monitoring for the artistes due to the sheer size of the stage and its physical distance from the orchestra pit, should not be underestimated. The distance from the elevatable pit to backstage is at least 30m and the scale guarantees that you can't see the orchestra in certain positions and won't be benefiting from direct sound. Acoustic flexibility has been added by ports to the side of the orchestra pit, which can accommodate additional musicians or be opened in sections right up to the auditorium ceiling to enhance the sound.

Main Auditorium

The house system for the classical horseshoe-shaped main hall is a 35kW five channel LCR and Stereo Surround MT4 system, with the LCR effectively hung around the stage and the rear speakers secreted discreetly among the back walls. "The choice of MT4 was fairly simple because we had very definite requirements for headroom," remembers Tiitinen.

"The system is not geared for continuous high SPLs but rather for extreme dynamics. We're dealing with orchestral sources which have their own natural dynamics and the MT4 was the only system that could do it justice. Headroom was also important because of the variety of material we have to deal with here - everything from opera through ballet and on to the modern pieces and the occasional cannon - we believe the MT4 can handle all of this." Interspersed among the four balconies stretching up to the cheap seats are supplementary speaker sets, again secreted tastefully in the decor ensuring that coverage is total.

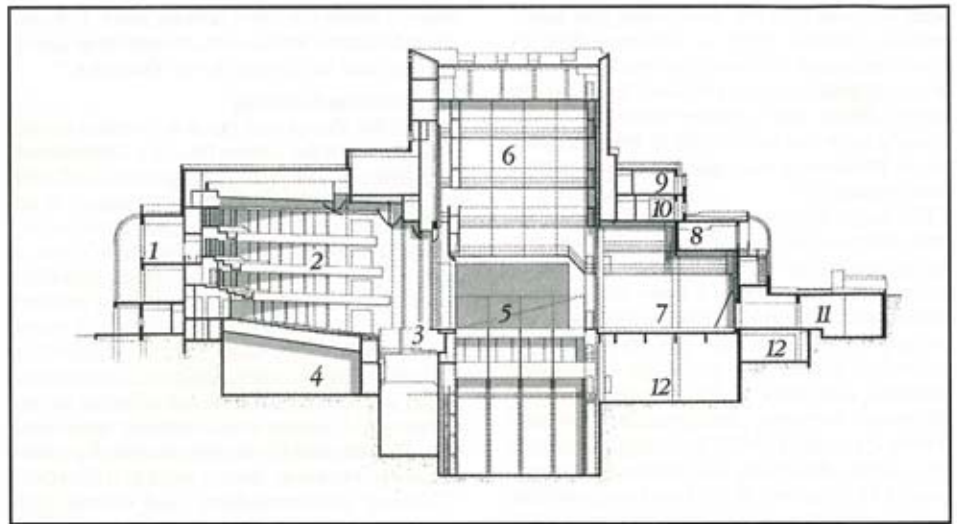
Control Room

At the time the building was designed the control room for the FOH Logic 2 desk was not detailed, and given the variety of performance that could be presented at the House it's probably just as well. The Logic lives in a sealed glass-fronted room at the rear of the auditorium ground floor, next to the lighting control room.

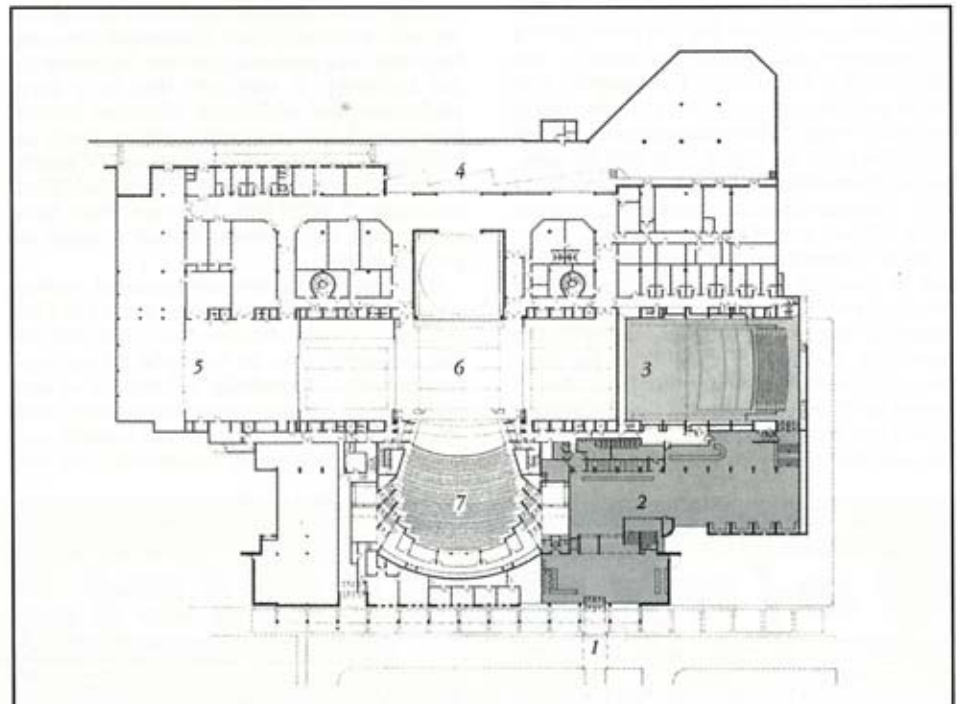
"Five years ago we wouldn't have known what this house would have been used for, but now that we do, with the equipment we've chosen, at least we can do something about it," says Tiitinen. "The politics of programming in a place like this can make our lives very difficult. A change in policy brings different producers and directors and the sort of show that comes in."

He has been through a similar experience while at the old opera house and oversaw the expansion over the years of the sound system to encompass surround and the use of samplers, in step with the requirements of composers and producers as they become acquainted with the new technology. However, he is happy and resigned to his fate: "As sound engineers we have to be very resourceful and productive," he remarks. His approach is perfectly in line with the adoption of the Logic 2 in its unusual, though comfortable, role as an SR desk which has had a profound effect upon productivity. "There are union considerations to take into account," he says. "Sound engineers work in shifts and if it so happens that a change of shift coincides with a change of rehearsal, for example, then the desk can be instantly and totally reset. This just wouldn't be possible with an analogue desk which would lead to compromises and confusion."

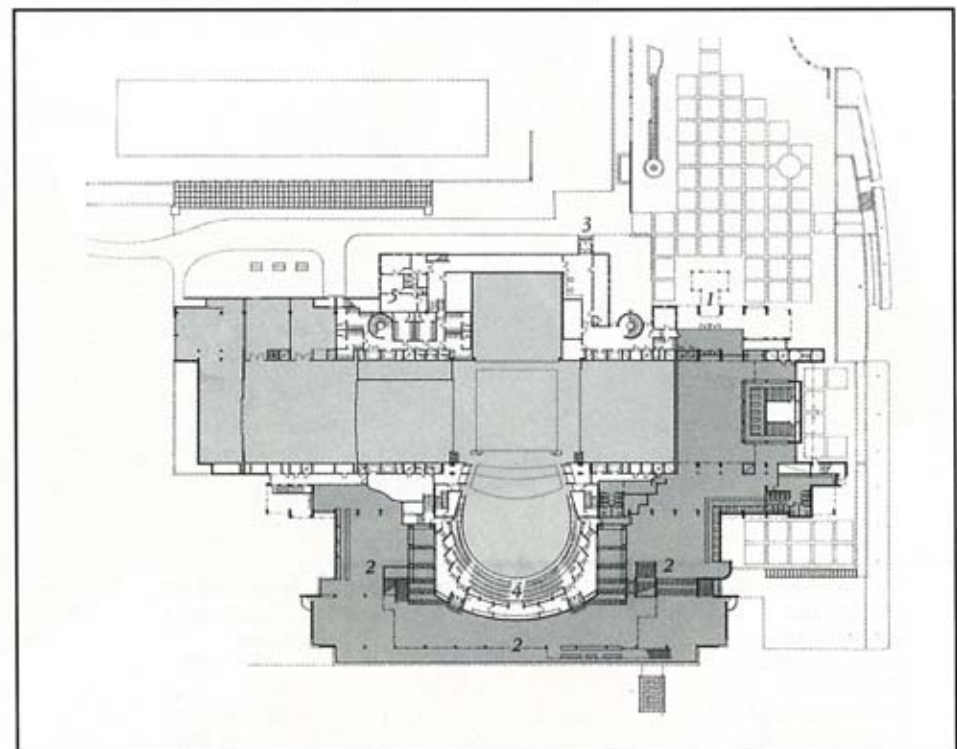
"The beauty of the Logic 2 is that the sound can be balanced in rehearsal, then you can do something else, and then your original settings can be used again for the performance in the evening. In this way nothing is wasted - the



Cross section through auditorium and main stage.



Ground Floor showing rehearsal stages (2 and 3) and main stage and auditorium centre (6 and 7).



First Floor showing main entrance (1), foyers (2) and balcony (4).

work you put into the desk helps you later," enthuses Tiitinen. "With an analogue desk it's almost not worth bothering too much between rehearsal unless you're prepared to physically switch desks with another one and that's actually what we used to do in the old opera house because it was quicker than resetting them manually!"

The Logic approach also aids the development and maintenance of continuity of a show run according to Tiitinen. "When the sound designer creates a feel for a show we store that in the Logic and nobody changes it because we believe in consistency. It's important to remember that in real terms the differences between operators is far greater than the differences between performances." He also praises the Logic's ability to change its nature for a show deploying its outwardly meagre looking 32 strips into its full four-layer potential for 128 input mega production mixing or a 1:1 if that's what's needed. "And the sound is something else," adds Tiitinen. "I'm 50, I started with valves, and all my life I've been fighting for headroom and against tape noise - this digital thing is the solution. I'm delighted with 16-bit and the Logic is 20-bit capable. This is the breakthrough." The whole complex is wired with fibre optic for digital links and transfers, but only partly implemented as the potential for such communications expands, becomes better defined, and of course, cheaper.

While theoretically the ideal, it's observed that in practice it's far from the complete solution and having the traditional wiring sorted out is currently a better way of having everything covered. "Flexibility is the key," states Tiitinen. "Nothing is so fixed that it cannot be changed - even the Logic 2 can be moved out through the window and set up in the auditorium. This isn't like some West End

musical where the show runs for years. The turn around is faster; we have to change things along the way and we have to be on the pulse."

Computerised Cueing

One of the things you quickly become aware of on a tour of the Opera House's labyrinthine corridors and chambers, is the uncanny skill with which your guides can time your arrival in an occupied room to coincide with a tea break. It's as if they're telepathic for there's not a squawk from a radio or an intercom. And then you clock the in-house TV monitoring system: basically there are monitors in just about every single room in the place. Channels corresponding to cameras and mics on different stages and different rooms are selected on an ordinary TV remote and in certain areas they even flip sequentially to give an overall picture of activity. However, there's more to it than that.

During performances and rehearsals numbers appear on the screen corresponding to cue numbers that are generated by the stage manager on a computer-controlled cue system devised by MS Audiotron. Thus a performer can keep tabs on a performance from anywhere in the building. If you add this to a very comprehensive traditional intercom system between all the production rooms, such as lighting and the subtitling room (all of which incidentally are supplied with clean feeds from the Logic 2 FOH and can mix their own monitoring), then communication is about as good as it gets.

"The purpose of the computerised cueing system is to make the stage manager's job a lot simpler," explains Tiitinen. "It's a difficult job and in certain cases he has to be giving cues continuously - sometimes a thousand in one performance - plus an intercom to listen and talk to, it's all very confusing and nobody can handle that. In Finland, traditionally we run

performances with one stage manager, whereas in German opera they often have four, which is great, but it costs money, the synchronization isn't always that tight and with modern music it's very much more complicated," he says. "I believe our system is the answer because it relies on one man - when he makes a mistake then it's a big mistake, but when he doesn't, then it's the best." The Cue system gives the stage manager the flexibility to create cues with video text for his own clarity which can interact with the lighting operators and fire sound effects remotely from Akai DD1000 magneto-optical disk recorders and Akai S3200 samplers in the sound control room. The system is working towards firing the Logic 2's snapshot automation system, the software of which was written specifically for the House, while retaining local console control for any necessary adjustments. "This is a much better way of cueing," believes Tiitinen. "The usual way of paging creates so much noise which creates panic and more noise. Ours is a calmer and more structured method."

Equipment

Main house system (35kW).

5 channel Electrovoice MT4, 84 Electrovoice Pro 8A/BES Surround effects speakers, 20 QSC EX Series amps, 32-strip AMS Logic 2 digital FOH desk, Amek BCIII sub and monitoring console, Several small consoles (EV BK842 and MS Audiotron Multmix) for monitoring purposes.

Distributed paging sound system (7kW).

1081 ceiling speakers (Atlas Soundolier/OWI/University sound paging horns), 8 QSC 1700 amps in bridge mode, Modified Millbank mixer, Communications and cueing systems.

RTS intercom (wireless and wired).

MS Audiotron-designed computer-controlled cueing system.

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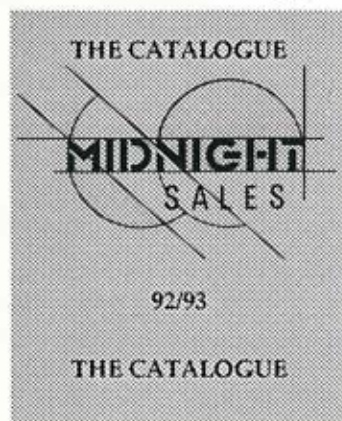
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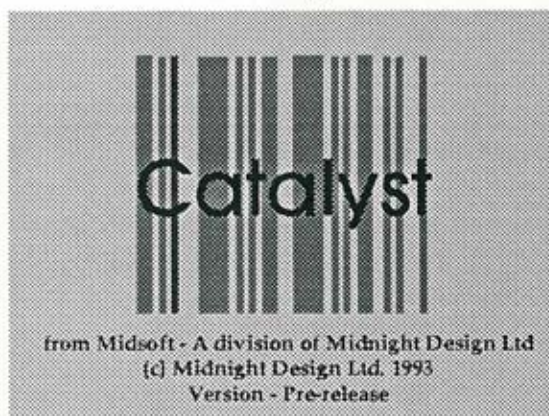
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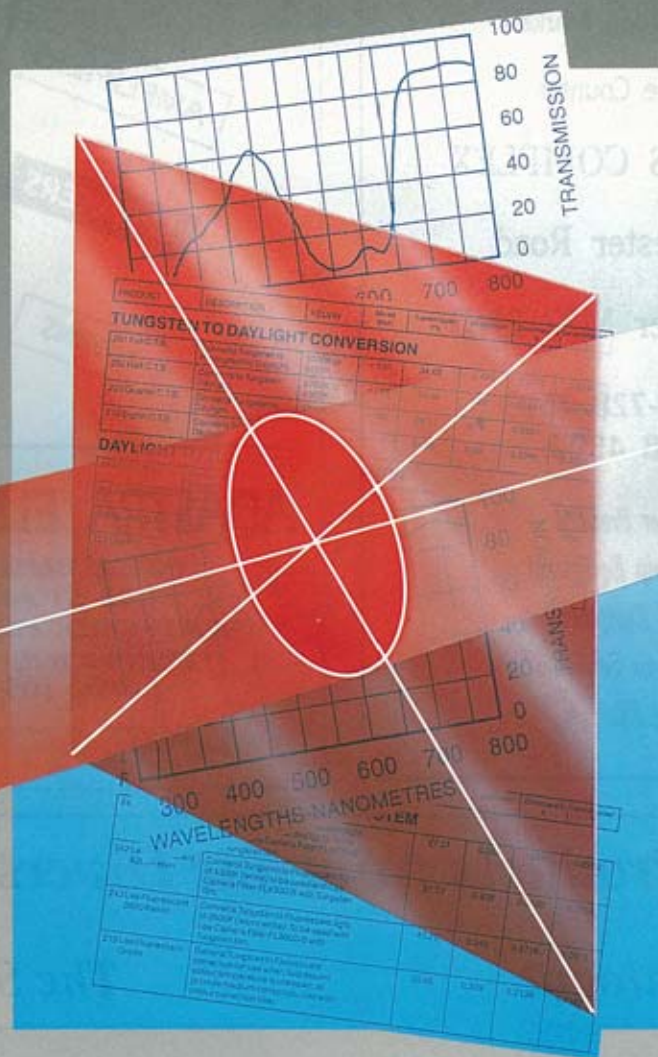
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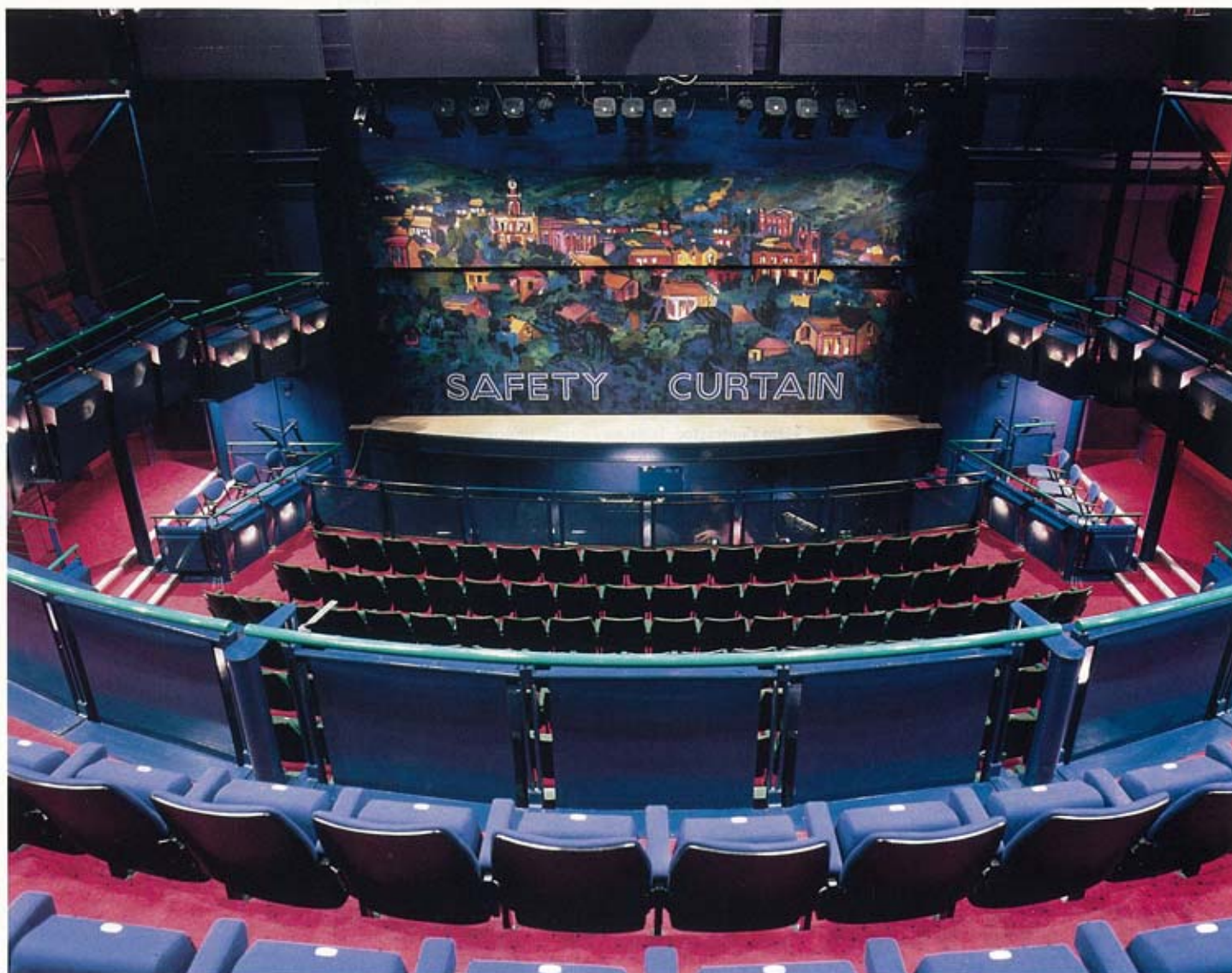


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TRANSFORMATION SCENE

Graham Walne takes a look at Basingstoke's refurbished theatre



The impressive new auditorium at the Haymarket Theatre, Basingstoke.

Whilst not quite achieving the cult Music-Hall status of Accrington, Oswaldtwistle or Scunthorpe, Basingstoke nevertheless sometimes brought forth groans whenever it was mentioned in theatrical touring circles. Certainly, the town made the mistake dozens of others did in the sixties and consciously decimated its town centre, replacing it with a traffic-free concrete shopping monstrosity. These days Basingstoke encourages its older buildings to be refurbished rather than destroyed, and this policy lies behind the decision not to build a new venue but to work within the original Haymarket Theatre.

The old theatre was a mix of developments with a foyer, bar and restaurant built in 1982 onto the listed 1865 Corn Exchange Hall. Since the site sloped, front-of-house passage ways were complex and much space was wasted. The auditorium was long and gloomy with little atmosphere and poor sightlines. The stage was tiny with virtually no wing space, since this was occupied with staircases to the dressing rooms below.

Stage depth was only 15' although this was enlarged by an almost permanent apron, the site of designer Elroy Ashmore's ingenious tricks which suggested a much greater space. Below the stage the dressing rooms were so bad that visiting actors were warned in advance so as to minimise the shock! However, theatre

people are adept at rising above such things and the Haymarket takes justifiable pride in a long history of memorable productions, both professional and amateur.

The decision to work within the existing theatre presented architects Renton Howard Wood Levin (RHWL) with possibly their greatest-ever challenge. In addition to the restrictions posed by the listing of the Corn Exchange, it was also thought undesirable to significantly extend the roofline by adding a full fly tower - such was the sensitivity of the local authority to their past architectural decisions. The island site and slope presented other difficulties.

It was a challenge to which RHWL, and their interior designer Clare Ferraby, rose admirably, and the new Haymarket represents perhaps their greatest work. Expectations were perhaps that the theatre would be simply brought up to the standard it should have been years ago: instead the designers have exceeded expectations and consequently have provided the theatre with a new image which is causing considerable excitement in the town. In fact, the theatre is so good that it now challenges the productions to match it!

The stage front has been brought forward (with the proscenium) providing an enlarged acting area and this is additionally served by a

forestage elevator which, in the usual fashion, can also be an orchestra pit or space for two extra rows of seats. An enlarged wing on stage right provides much needed space for trucks and scenery, which can be loaded in and out via the adjacent hoist. The raised loft does enable flying to be carried on out on hems, but sadly there are no counterweights, just motorised winches for the electrics. A new sound, lighting and communication system has been installed.

The biggest change is to the auditorium. RHWL have enhanced the old barrel-vaulted Corn Exchange Hall and constructed almost a free standing 'high-tech' metal structure within it. The mix of the old warm building and the new blue metal is exciting, and wisely RHWL have curved the circle and provided the fascia with lights so that, although the material is new, the feeling is complementary both to the old building and to what an audience expects of a theatre.

There is an air of expectancy in the Haymarket now. The seating capacity has been increased from 402 to 456 (less 37 with orchestra). The colour scheme is reflected in a painting of Basingstoke on the Safety Curtain by Clare Ferraby. Elsewhere, Elroy Ashmore has designed a mural which includes hints of the theatre's past as a skating rink and cinema.

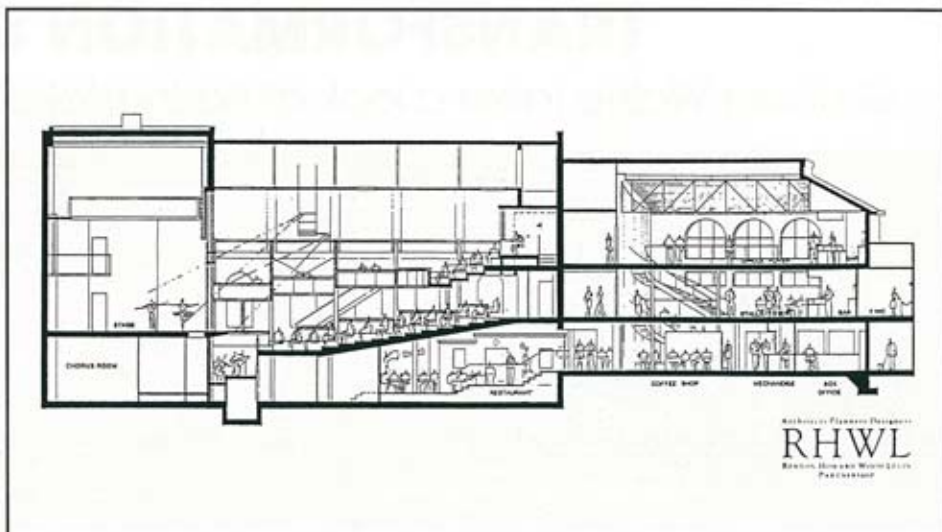
Additionally, a specially commissioned glass entrance canopy throws coloured patterns of light on the pavement, hinting at the excitement of the theatre within. Front-of-house the confusion of levels and staircases have been swept away into three simple levels reached by a linking staircase, which is a major feature of the Haymarket.

There is an air of space and relaxation, but Clare Ferraby's colours cleverly become more theatrical towards the auditorium doors and contrast with the cooler and cleaner lines of the bars. Beneath the auditorium lies the restaurant which has been designed to reflect the theatre experience by subtle use of mirrors, lights and alcoves.

Through the efforts of Glyn Williams, head of leisure services, office space was provided on two floors adjacent to the theatre and connected by a bridge. This is a significant development for the Haymarket Theatre Company who, in the past, were on a site some distance from the theatre. Now they feel part of it. The annexe also includes a rehearsal room.

None of these would have been possible without financial support and whilst the Foundation for Sport and the Arts gave a welcome £100,000, and Hampshire County Council an equally welcome £640,000, it was the commitment of the local authority, Basingstoke and Deane, which was the catalyst with their £2.5m of funding. The authority are also spending an additional £12m on the creation of a concert hall on the other side of the town centre, and Lighting and Sound International will report on that opening in March next year.

Client: The Haymarket Theatre Trust
Agent: Basingstoke and Deane Borough Council
Architects: Renton Howard Wood Levin



Renton Howard Wood Levin's cross-section of the Haymarket.

Theatre equipment engineers: Technical Planning International

Main Contractor: Trafalgar House Construction

Proscenium arch: 9m wide x 5m high

Performance area: 9m x 8.5m

Stage: flat semi sprung

Get in: stage 3.5m above ground level doors 2.7m x 5.5m high, 1 tonne electric hoist (forestage elevator also serves street level and can be used to lift larger items onto stage)

Depth: setting line (sl) to front 1.5m, and sl to back wall 8m

Sl to last bar: 7.1m

Wing widths: stage left 2m, stage right 8m

Flying: 5.500 kg winches, 29 4-line hemp sets on 10m long bars, flying height 10m

Lighting: Strand Gemini, 120 2.5kW and 4.5kW dimmers existing stock of luminaires restored and re-used.

Sound: Soundcraft Delta 24-4-2 desk, 2 Revox tape recorders Denon twin deck CD player, Tascam DAT machine Dynacord DRP15 digital effects unit, Akai S01 sampler, selection of microphones and accessories, 4 Tannoy CPA12, 2 Tannoy 12, 8 EVS40TB, 2 Community CSX-60B, 4 EVS200. Delay and image shift system.

Comms: SM desk, prompt corner stage left or right
Cue lights: intercom, induction loop, 2 channel infra-red system, paging and show relay, video show relay.

Artistic Director: Adrian Reynolds

Financial /Admin Director: Tim Brinkman

Head Technician: David Ripley

(Graham Walne lit several productions in the old theatre and is now on the Board as Chairman of the Artistic Committee; his term of office will end later this year and he is due to light 'The Lion in Winter' at the new theatre next year.)

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ON TOUR

AND PRODUCTION NEWS

The Orb Copenhagen Harbour LD: Chris Craig

Reminiscent of the Floyd at Pompeii, the concert by The Orb at 'Trekroner' in Copenhagen harbour was a hippy dippy affair, lots of kids with silly clothes on, stars in their eyes and acid in their blood, and an endless patient queue at the foul smelling porta-loos. It was not so much a concert in the way we have come to understand the modern popular music show, more a celebration of sound, light and dance - more an event, an occasion. Will the teenagers who were there that sunny August evening in Copenhagen ask their friends in 20 years hence, "were you at The Orb show in '93?" Will any of them be able to remember it? In keeping with its illustrious predecessors from the sixties, this show was remarkable for the lack of Police presence, the inadequate facilities and how readily accepted this was by the people whose misfortune it was to suffer them. The laissez-faire attitude towards safety was prehistoric and most of the crew concurred that this show would never have been allowed to take place in the UK (fortunately, the crew took their responsibilities more seriously); it did however have a fantastic atmosphere.

The 'Trekroner' is an old sea fort at the entrance to Copenhagen harbour. Reputedly the first concrete structure ever built in Denmark, the fort would, from the air, resemble a horseshoe-shape with its curved back to the sea and its open mouth forming a protective cove facing the mainland. The ramparts rise an almost sheer ten metres to face the sea sloping gently behind, down into the cove. Beneath these fortifications are a series of interconnected rooms for cannons and other defensive weapons. At the centre, astride the wall, is a lighthouse and to each end of the horseshoe at the entrance to the cove are large brick-built houses, presumably barracks for the troops stationed there.

This is the first time the fort had been used since the end of the Second World War, as was substantiated by the odd German military sign still visible here and there, surprising really as this is an excellent site for an all-night concert, being well away from any habitation. The stage was set upon a large floating pontoon, approximately 30 x 20m, anchored within the cove facing toward the audience who were arrayed along the backside of the fortifications' ramparts, which formed a natural amphitheatre around it.

Chris Craig, The Orb's lighting designer, had invested a substantial amount of time and effort in arranging lighting for both the stage and its surroundings, in many ways providing production management for the whole show in terms of presentation. He also covered the Herculean task of operating the lighting system and the many DJs who performed that night as well as the dawn and dusk performances by The Orb. He also specified the lighting system (provided by a combination of SpotCo and unusually Optikinetics who, as a manufacturer, took it upon themselves to support this event directly), for the entire site detailing the set-up for atmospheric lighting around the fort and also within the ramparts where the exotic delights of 'brain machine', 'chill-out lounge' and 'pillow-room' could all be sampled.

Despite their imaginative names and the lighting Chris had installed (combinations of Solar 250s and Emulators), these rooms failed to live up to their names largely due to the lack of effort by



Above and below, The Orb in Copenhagen.



the promoters. Admittedly, the fort was pretty dilapidated, but a bit more work on their part would have made a great deal of difference - the room the Red Cross had to work from was positively medieval. Midway between the lighthouse and the entrance to the cove were the PA delay towers with a pair of Optikinetics Solar 575s positioned on each tower with four Club Strobeflowers beneath them. Close by each tower was a three metre inflated white fabric sphere with a Terra strobe within it and at the extremities of the cove beside the two barrack buildings were a further four Club Strobeflowers on a wind-up stand. The positioning of these effects was perfect as far as encompassing the area was concerned and would have done a great deal to liven up the whole island, unfortunately (for lighting purposes at least), it was a remarkably clear dry night and the absence of dust particles or moisture in the atmosphere prevented the strobes from performing as dramatically as they could. Although the Solars looked good projecting onto the sphere, and incidentally onto the white painted surface of the lighthouse, they really needed the support of a more powerful strobe to be truly eye-catching - even the use of a smoke machine wouldn't have helped, as a light breeze was constant throughout the night.

On the main stage however, things were a lot different and not prone to the vagaries of the

weather or rather the lack of it. Hung horizontally from the front edge of the roof were eight Clay Paky Superscans whilst from the rear hung a six metre-diameter circle of Trilite with yet another inflatable sphere (perhaps I should call them orbs?) within it. The Trilite had 16 Dataflash units equally spaced around it and a couple of Terrastobes. On the floor, either side of stage and approximately two metres from the front edge, stood a section of pre-rig truss on end, which provided support for two of the four Goldenscan 3s on stage, a Solar 575 each and an array of Kodak Carousels which projected onto two small screens either side of the sphere. The truss was also lit from within by a par fitted with a Colomag. Several smoke processors managed to keep the stage suffused with smoke when the occasion demanded - which was often. From the front of house, three further Solar 575s projected onto stage, one across the back cloth of the stage covering the sphere and creating a corona around it, the other two focused upon circular screens, again formed by Trilite truss on each of the PA wings; not exactly a huge system but one that Chris was able to extract a profusion of looks from. At the start of the show, approximately 8.15pm (though I have to say I was unable to clearly discern exactly when the DJs finished and The Orb began - apparently this was the intention), Chris started work. Twilight was still with us and he initially relied heavily on the brighter 'Scans and Dataflash to give the impact required, gradually introducing the rest of his armoury as darkness hardened into black.

He ran a busy show constantly turning from Wholehog to Dataflash controller and back again. It was noticeable also that he was still programming in new looks as the evening progressed, as he explained: "Despite having part of the previous night to programme, a lot of the show is improvisation because of lack of time," (the 12 hour show was unrehearsed), "but I love it - the Hog is a great desk for these type of events once you get used to it, and having the opportunity

to work with all this expensive equipment for this sort of show inspires me." What, at first viewing, appeared very much a 'busk' show (the music allows for a very abstract and unconventional style of lighting), became more and more fascinating as Chris returned time and time again to the same pieces of equipment only to produce yet one more unused look.

The staging, roof and PA system was supplied locally. With little flown lighting and almost no set, bar a few risers, the stage and roof was purely functional. Likewise, the sound system (the control of which came variously from the DJs or bands who used it) seemed anonymous and although essential, the night's experience was in essence visual. The JBL system was, in fairness, at all times extremely punchy and clear, this was however at the expense of the top and bottom extremities which were seemingly squeezed right out for the entire night. This was apparently to the liking of the audience and speaking to the many English people who had come over for the event, the preferred style of sound for this sort of show. Whether, in their heightened state they could actually discern what they were hearing was of good quality or not, is open to debate. Whatever it was they were hearing, they liked it.

Someone else who was having a good time was Optikinetics' MD Neil Rice who seemed to spend the evening enthusiastically teasing and coaxing the Solars into perfect brightness and focus each time the breeze brushed them off target. His efforts were well placed, the geometry of these effects is quite exquisite, and as with everyone else present, both punters and workers alike, he was obviously enjoying every moment.

Steve Moles

Kiri Te Kanawa in the Royal Crescent

News from Meteorlites covers an unusual brief to provide the lighting for a September concert by Kiri Te Kanawa in Bath's majestic Royal Crescent, where problems with some of the residents' demands made lighting designer John McCullagh's life a little less than easy.

"The stage rig consisted almost entirely of Vari*Lite VL5's," John told L+SI, "which I like for their flexibility. As I intended to highlight the trussing, their neatness couldn't have been beaten by a conventional rig. Fresnels were used to give extra 'lift' and Cadenzas and Cantatas were used for backlight and stage specials. The stage was a 60' x 40' dome, for which Steve Tuck provided a star cloth to drape the entire outside, creating a giant planetarium which gave enormous depth to the stage itself and had a great 'oooh' factor with the audience.

"The stage was a remarkably neat and tidy structure which fitted in well with the location, but I felt that the 17m high towers for the PA system detracted from the beauty of the setting, so I decided to have them erected in silver, to light them and incorporate them into the presentation, adding another dimension to the production.

"The site presented a number of problems, mainly in that the residents would not allow any equipment to be placed on the lawn in front of the Crescent itself. This left me with a 90m throw from the back of the stage. To add to this, a number of residents refused to allow their houses to be lit,



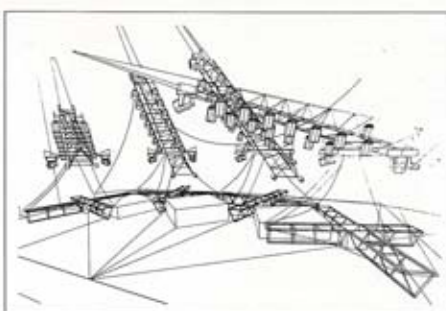
and this left some parts of the Crescent in darkness. For the general colour wash I used 2.5k HMIs with dimmer shutters and colour changers. Intellabeams were used for gobo work and general relief. All these units were mounted at the back of the PA tower and the combination worked well, despite the throw involved."

Equipment List:

- 44 x Vari*Lite VL5
- 14 x Intellabeams
- 6 x 2.5k HMIs with colour changers and dimmer shutters
- Whole Hog control desk

Crew: Lighting designer: John McCullagh
Intellabeam technician: Chris Savage
Technicians: Roy Davidson, Tony Maxwell, Graham Feast
Hire manager: Tony Panico

Big Booms Highlight Miguel Bose Tour



Four crane-linked booms provided a spectacular, yet highly flexible lighting and staging scenario for the summer tour of popular Spanish artist Miguel Bose. Each lightweight aluminium 12m 'arm' was engineered to tilt almost through 90 degrees, from near floor-level to a vertical position, as required. In addition, the two outer cranes had pan mechanism. All the various elements of each boom were put together with the standard Tas-truss pin system with the support composed of Tas-truss and five-way corners. The whole system was computer-controlled from the stage.

The concept, technical and lighting design for the tour was provided by Belgian company Arf & Yes with set and structure design by Ronny De Gruyter. Lighting designer was Ignace D'Haese. Arf & Yes told L+SI: "The concept was developed for touring in a country where it (almost) never rains, and if you can be as good as 100% sure of the weather, then you don't need a roof structure. We didn't want a ground support and wanted to make full use of the Vari*Lite VL5 system, using relatively few lamps, but maximising their full potential. We reduced the cost to a minimum by using a lot of rental truss as part of the structure. The almost unlimited number of boom positions obviously gave the designer no end of possibilities to change the lighting atmosphere."

Credits: Construction structures: Tas-Stage
Lighting, sound and crew: EML
Vari*Lite: Vari-Lite Spain

Crew: Structure operator: Marc van Gorp; Vari*Lite operator: Dirk Bosloir; Vari*Lite engineer: Axel van Bree; Celco operator: Wilfried van Streels; lighting engineer: Philippe Lengele, monitor mix: Peter Schmidt; Sound engineers: Xavier Theys, Stefaan Geens

Lighting equipment:

- 12 x Vari*Lite VL2s
- 64 x Vari*Lite VL5s
- 10 x Dataflash
- 2 x 6-bar 64s
- 28 x Par 64s (8 with scrollers)
- 2 x Par 46 Raylights
- 5 x Molefay with scrollers
- 6 x Halolux
- 1 x Multibeam 3k Xenon with shutter/scrollers
- 2 x 2.5k HMI followspots
- 4 x smoke machines

Pavarotti Heavy Metal

The Earl of Harewood's 70th birthday celebrations, which included an open air concert of operatic excerpts at Harewood House near Leeds, saw some substantial staging from Hangar Services coupled with an eight-pillar self-supporting roof structure from LiteStructures, the largest of its kind they've executed to date.

The design was possible because Hangar's steel stage deck system included base columns with 1.5 tonnes of cantilever into integrated interfacing for the mast sections. This successful union of aluminium and steel is set for repeat in a series of concerts for ITV's South Bank Show featuring Pavarotti, Domingo and Carreras which will be shown later this year.

Meanwhile, thanks to two of Screenco's 48 metre Starvision video screens, 25,000 Pavarotti fans were able to see close-ups of their newly slimmed down idol in concert at Leeds Castle, Kent in late August. Video feed from three fixed cameras and two mini-cams mixed at an OB unit were provided by Screenco's sister company Creative Technology. A familiar site at high profile events these giant video screens are instrumental in creating spectator satisfaction and are now an expected norm at mass audience events throughout the world.



Above left, Pavarotti on the big screen during a performance at Leeds Castle in Kent, whilst the three remaining photographs show preparations underway at Harewood House in Yorkshire. The system will be used in the Autumn for concerts to be featured on ITV's South Bank Show.



Tour Tech Takes Europa

Northampton-based sound hire company, Tour Tech has taken delivery of their first Soundcraft Europa front-of-house console from Marquee Audio. First out with the new 40-Channel Europa are the Lovellers who will use it for a tour of UK and Europe. Future demand on the desk has been so great that Tour Tech have reported that they have already booked it out through till next Spring when The Wonderstuff have it lined up for their UK and European tour. The Europa will be working alongside Tour Tech's stock of Soundcraft consoles and their own TTS4 range of loudspeakers.

First Appearance

Bon Jovi's recent gig at the Milton Keynes Bowl was the setting for the first public appearance of Screenco's new Jumbotron giant video system. The Southampton-based screen rental company has now added two of the 37.5 square metre display systems to its fleet of five Starvision daylight screens. The new screens are of modular construction and may be configured in a variety of shapes and sizes from five 13 square metre displays up to one giant 72 square metre display.

The company's David Crump told L+S: "Complementing the Starvisions perfectly, the Jumbotrons' flexibility in format will enable us to provide displays at a much wider range of events, particularly those indoors and where access is limited."

SSE's Busy October

Tours and events out in Europe for SSE Hire of Birmingham this month include sound for UB40, World Party, Allannah Myles, Nelson Mandela, Curve and James Brown. Consoles include TAC, Midas and Ramsa with Electro-Voice speakers.

Whole Hog: Demo to Purchase

Rather than see the usual showroom demonstration, Tom Aukes of Aukes Theatertechnik BV of Holland wanted to see Flying Pig's Whole Hog control console used in anger. It was duly packed off to the Wageningen stadium to see how it would cope at a major international agricultural celebration. A big production was involved that included the use of 10 Golden Scan 3s, four Golden Scan 2s, six Summa HTIs, 32 Rainbow Alfrescos, eight Rainbow 8-lites, four 5ks with Rainbows and over 100 10A and 20A dimmer channels. Control was by DMX from the Whole Hog.

"My only real problem was the length of the control cable runs as the fixtures were distributed all around the stadium," explained Tom Aukes. "Fortunately the Hog has 12 DMX outputs so I could run out separate lines to various areas and with the use of four additional DMX boosters the production went off without a hitch."

As you will have gathered from our headline, Aukes Theatertechnik kept the Whole Hog to add to their already impressive stock of rigging and lighting equipment.

David Copperfield with EAW

Padco Konzert Akustik-Systeme GmbH recently embarked on a tour of shows with magician David Copperfield, which will cover Germany, Austria, Switzerland and the Netherlands. For the larger venues such as the Frankfurt Festhalle, Padco are employing the EAW Virtual Array system and sub-hired extra cabinets from their neighbours in Dusseldorf, Ton-Art Showservice.

EMO Graphics on Tour

EMO Systems GEQ series equalisers are being used by Billy Idol who is currently touring with Bon Jovi. The rig supplied by Clair Bros uses GEQ60 Equalisers for stage monitor equalisation. Other EMO users include The Scorpions who are currently rehearsing for their forthcoming tour: 12 channels of equalisation are controlling the Audio Rent monitor system.

Apogee in Bull Ring

Performing in the bull ring in Madrid, sound for Spain's leading rock/pop artiste Manolo Teno was provided by an Apogee system from their distributor Sony Espana. The primary system consisted of over 60 tri-amped 3X3s. A large complement of AE-6 and AE-4M floor monitors provided foldback, and the new CRQ-12 parametric equaliser was used to tune the system. 60 Apogee amplifiers were also employed in a show that had an audience of 30,000.

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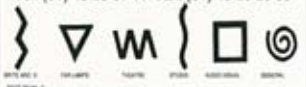


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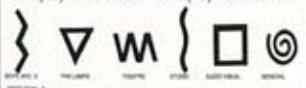
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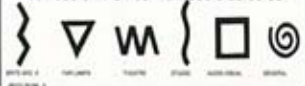
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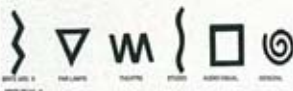
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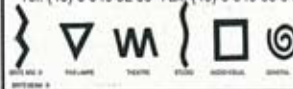
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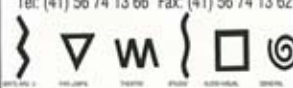
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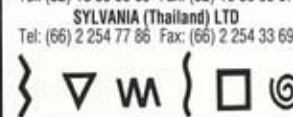
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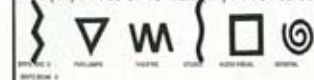
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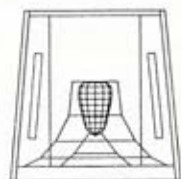
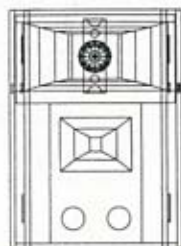
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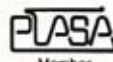
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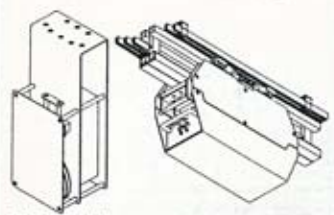
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VIEWPOINT

Derek Gilbert on

Control Protocols: why PLASA should lead the way

My credentials for chairing the DMX panel at this year's PLASA Show were beyond reproach. I don't work for a lighting manufacturer or rental company, I'm a virtual computer illiterate and I've never attended any of the numerous DMX sessions of recent years at PLASA, LDI, USITT or anywhere else on the circuit!

Clearly some personal research was necessary in preparation for chairing this seminar. There were advance discussions with panel members Steve Terry, Paul Mardon, Adam Bennette, Marco van Beek and Philip Nye, as well as with other interested parties including Tony Gottelier and Peter Brooks.

Despite the experts being in general agreement that positive action is needed to create an eventual DMX replacement, to date the industry hasn't succeeded in getting its act together with practical forward progress. This despite several well thought out proposals and an awful lot of talking by the engineers.

A position was becoming clear to me and one that I can best describe using Steve Terry's words: "The stage has now been reached where the protocol debate has to be led by market pressure, and not by intellectual pressure".

September 13th dawned, the seminar opened to an almost full-house of 60 plus, and our speakers presented their cases. Adam, Marco and Philip concentrated mostly on engineering issues and covered important ground. Paul's contribution was the most controversial and his case - that we already have all the protocols we need and that we can cope with the inadequacies - was well argued. Steve, who of course has been the leading participant in USITT's development of DMX 512, was convinced of the urgent need for a higher level standard. He also drew attention to some of the practical difficulties in protocol development - mechanics, funding and patents for example - and cited relevant parallels in audio and marine electronics standardisation in the USA.

The ensuing discussions produced more interesting views with David Bertenshaw and Tim Burnham prominent amongst more than 15 contributions from the floor. Some specific progress was made with arrangements put into place (since the seminar) for DMX start code registration. Clearly broad agreement on many of the engineering issues that need to be settled is fairly readily achievable - that is if changes are to be made at all!

The first step is probably a further upgrade to DMX 512 with the second step being definition and development of a new protocol to be available perhaps 12-18 months later. There was

consensus too that this must be handled through a small representative industry working group and not through open meetings or large committees. I agree. Several contributors focused interestingly on practical and market issues.

Encouraged by the response, I felt that it would be helpful to quantify the opinions of those present and called for a show of hands on a number of issues. The questions and the approximate vote counts were:

1) Is there a need for a new or extended standard protocol to replace DMX 512 for data interchange in the entertainment industry?

Yes - 50+ No - 1, Don't Know - 8

2) Should PLASA offer to take the lead in development of the new protocol subject to availability of funding from the industry and in co-operation with other international bodies, particularly USITT?

Yes - 50+, No - 1, Don't Know - 7

3) Question 2 was repeated to non-UK representatives only.

Yes - 12, No - 0, Don't Know - 3

4) Would lighting manufacturers, rental companies and major users represented here be prepared to contribute resources or funding? (Only one reply per company)

Yes - 21 No - 0, Don't Know - several

PLASA's standard officer George Thompson managed to compile a list of 18 of these, but three escaped, including I believe one Australian!

So PLASA, please continue the talking that you have already started, especially with USITT, because if our two bodies can work out a combined approach, a successful outcome is



Derek Gilbert is a chartered electrical engineer, a fellow of the IEE and managing director of Reading-based Glantre Engineering Ltd, one of the leading international theatrical and audio-visual engineering contractors who have twice won the Queen's Award for Export Achievement.

virtually assured. And I speak as a representative of one of the few paid-up corporate members of both associations! I furthermore submit this 'Viewpoint' as being not so much a personal one, but rather as one that hopefully carries extensive international industry-wide support.

Anyone interested in joining the DMX512 working group should contact the PLASA office as soon as possible. For further details see the official notice on page 70.



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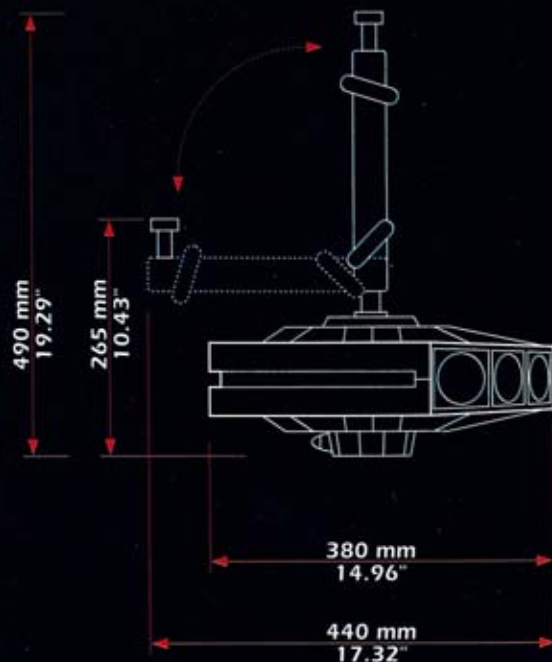


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versatile it's your choice



- 7 light tunnels or 7 bright beams
- 7 built-in filter holders
- 7 high definition piano-convex lenses
- die-cast aluminium body
- finish: scratch-resistant black epoxy powder paint
- double die-cast aluminium articulated joint with steel ball and socket for unit tilt and pan
- 1 threaded hole M10 on the upper spheric pin
- access door located below for easy replacement of the lamp
- can be operated in any position
- natural convection air current
- protection range: IP 20
- beam angle: 115°
- typical throw distance: 3-12 mt.
- weight 5.5 Kg/12,1 Lbs
- GX 9,5 ceramic lamp holder
- both Coemar Roundlux lamp (max 1000W) and 650W/750W lamp with internal reflector can be used
- cable in compliance with the safety norms IEC 331, IEC332 3C, CEI 20 35 2 core Ø1.5 +earth
- Versatile can work with any mains voltage (100V, 110V, 120V or 200V, 220V, 240V 50/60 Hz) by using the correct type of lamp.



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for lighting effects

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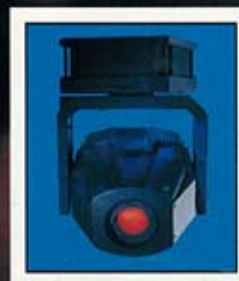


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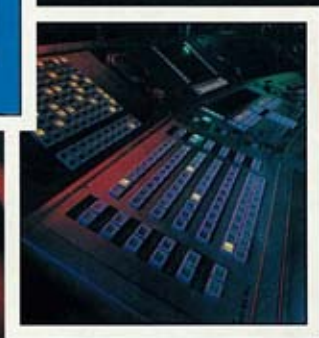
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