

Pulsar launch 'Oska' at Cambridge - review in this issue.

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LIGHTING SOUND International

published by the Professional Lighting and Sound Association

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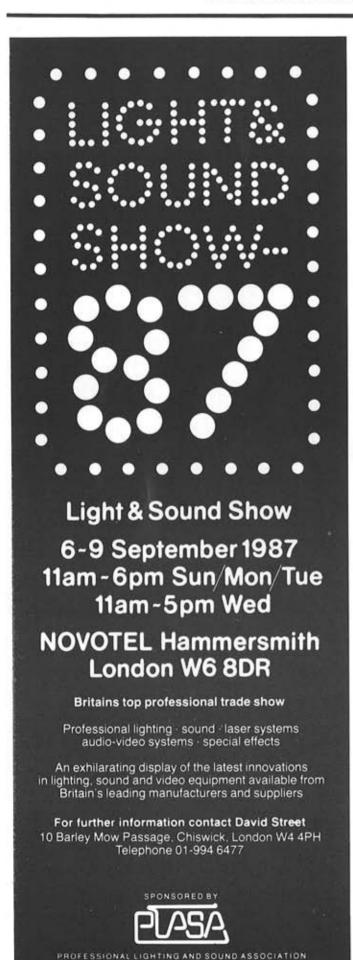
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Annual Subscriptions:

UK £20.00; Europe £25.00; airmail £40.00.

LIGHTING SOUND News



Light + Sound Show 87

PLASA's 1987 Light and Sound Show, sold out for months, and with a waiting list of over 15 companies, looks set to provide a grand springboard for the 1988 Show at Olympia 2 when over twice the space will be available for exhibiting companies. Novotel at Hammersmith will literally be bursting at the seams to accommodate the 1987 Show from September 6th-9th, and organiser David Street is confident of another big increase in visitor numbers.

"I say it every year, but this year's will be our best Show ever, with interest and enquiries far exceeding 1986," he told L+SI recently. 47,000 registration cards have already been distributed through mailings and to previous visitors, and there's one for **YOU** in this issue. (Simply photocopy the card if you need more forms.) Remember that by registering up-front you save a £3.00 payment on the door.

An increase in overseas visitors is expected yet again (there were 400 in 1986), and PLASA is organising an inward trade mission for North American buyers in conjunction with the British Overseas Trade Board. It's all part of a build-up that will put London's Light and Sound Show firmly on the international scene, and able to compete on equal terms with the handful of world-wide shows serving the industry.

A further 'internationalisation' of the Show will see seven members of APIAD, the Italian trade body, giving equipment demonstrations in Salons Bourgogne and Beaujolais - a total of 120m of space - backed by the Italian Overseas Trade Board. And, British companies be warned, APIAD have made an early enquiry for a much larger area of space at Olympia next year.

Outside exhibition hours, two evening highlight events take place on Monday 7th and Tuesday 8th. On the 7th, the D.I. Industry Awards will be presented at Le Palais - just across the road from Novotel - and tickets for this one are available on application to Disco International magazine. On the 8th, Turbosound Limited are holding a party, in conjunction with Disco Mix Club and the First Leisure Corporation, at Regals in Uxbridge 'to celebrate another year of tremendous growth' and to introduce their new mid/high speaker enclosure - Regals is the first venue to be fitted with the TSE-211. There will be a performance by the World Disco Mixing Champion Chad Jackson and a live concert, and tickets are available from Tim Chapman at Turbosound's head office or from Stand 92 during the Show. A shuttle coach service will take you from Novotel to the party.

A few up-front 'snippets' of information of new products due to be launched at the Show are detailed in this issue of L+SI, but the most comprehensive listing appears in the **Official Catalogue** which will published in late August and mailed to all UK readers with their September issue. It will reach you in good time before you set off for Hammersmith. The Catalogue will also be given free to all visitors at registration.

Avoid delay at the door by pre-registering - FREE (£3 on the door)

NO ADMISSION UNDER 16

REGISTRATION CARD WITH THIS ISSUE

All-British from Starlight

Cheaper, faster design and fitting out of clubs is promised by Starlight Design, the Cambridgeshire manufacturers and wholesalers. Two recent acquisitions by the company will reduce reliance upon foreign imports and speeding up timescales, dramatically improving service and quality. Graham Smith, MD of Starlight Design, which has carried out a number of major club re-fits, told L+SI: "We have acquired the manufacturing rights to the UK Astro Lighting designs and been appointed sole distributor for the Isoframe spaceframe system in the discotheque industry. By bringing both these well-known ranges of products under one roof, we can now offer a comprehensive supply service for trade and retail customers alike."

The Isoframe spaceframe is a highly flexible, low-cost system available in polycarbonate or aluminium which has an international reputation in fitting out shops, exhibitions, conferences and presentations. Starlight Design has been appointed to spearhead the marketing to the club market. Graham Smith explained: "It is a very simple design system for creating the framework for visual displays and it can be installed with non-specialist labour. In fact, it can be easily assembled off-site and then installed - thus

cutting down on-site fitting time."

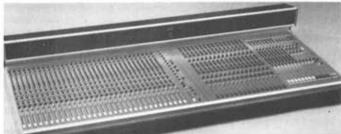
Astro Lighting designs cover a wide range of equipment including pinspots, scanner banks, nodding scanners, helicopters and mirror spinners. All of these plus a range of new products will be manufactured by Starlight Design at its Cambridgeshire works.

Graham Smith claims that this all-British combination will even have export capabilities, competing with the manufacturers who export to Britain. For further details contact Graham or Marion Smith on (09544) 8841.

New at PLASA Show

Hill Audio are exhibiting for the first time at the Light & Sound Show this year as part of a continuing diversification in terms of areas of involvement as well as world-wide distribution.

They will be exhibiting their 'OO' and 'OOO' ranges of power amplifiers which include DC servo-controlled continuously variable speed fans, full thermal and short circuit protection and screw terminal for all inputs and outputs specifically for installations.



Hill Audio's Concept Series.

Also on show will be the 'mix' series of non-modular mixing consoles available in 8:4:2 (Rakmix), 12:2/12:4:2/16:4:2 (Multimix), 16:4:2 (Soundmix 16), and 24:4:2 (Soundmix 24) f.o.h., and 16:6 (Stagemix) monitor configurations. These consoles (especially the Multimix) are being used in club installations where their sound quality, flexibility and reliability have made them very successful. For use in larger systems, the recently introduced Concept range of modular consoles, available in any format from 24/8/2 up to 56/24/48/2, will be demonstrated. Speaker systems will be represented by the new M5 system.

Effects Lighting Appointment

lan Wasden has recently been appointed sales and marketing manager of Leicester-based Effects Lighting, specialists in the design and installation of lighting schemes to the leisure industry. Previously with a Birmingham-based interior design and contract furnishing company, lan, who hails from Sheffield, has considerable design and sales experience within both the corporate and leisure market.

Atlantic City Date

Opportunities Expositions Inc., promoters of two Nightclub & Bar Expos and national conferences, has announced that its November Atlantic City Expo in the US will become an international exposition.

According to Dr. Ed Meek, president, agreements have been reached with European and American manufacturers of products to develop the Atlantic City Expo as an American International Exposition and World Conference. The Exposition will be held November 4-6 at the Atlantic City Convention Center.

"With the encouragement of manufacturers, we will develop our Atlantic City Exposition as an international market for nightclub, bar and restaurant products. Our Las Vegas Exposition, scheduled for March 28-30, 1988 will serve as a West Coast exposition," Meek told L+SI.

Meek said he had received strong encouragement and commitments from major groups in Europe and the United States to develop a single international exposition which will serve as an American counterpart to the Rimini Trade Fair held each spring in Italy.

PLASA will be represented at the Show by Secretary Tony Andrew who will look after an Association stand. A PLASA seminar/presentation is also planned with the object of promoting British member's goods and services to the North American market.

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Duke at the Globe

HRH The Duke of Edinburgh recently attended the ground breaking ceremony at the site of the Globe Theatre on London's Bankside. The Duke was there to see an oak from Windsor Great Park placed into the ground alongside 24 others which had been donated from countries all over the world. The ring of timbers marks the outer circle of the Globe itself.

Work will begin on the project next year with completion due in 1992. The site will eventually house a museum and indoor theatre in addition to the reconstruction of Shakespeare's theatre. Completion will mark a triumph for Sam Wanamaker who created the idea eighteen years ago. The design team includes architect Theo Crosby and consultants Michael Holden and Graham Walne.

Doughty Engineering at PLASA

Doughty Engineering, a well known company established for 20 years in the haulage and farming industries for their HGV trailers and forklift attachments, last year branched out into the metalwork side of the entertainments industry.

Since their initial approach with a range of very competitive standard brackets and spigots for hanging, lighting and scenery, they have over the past 12 months considerably increased their product range with a fresh approach and many new ideas.

Amongst the exhibits on display at the PLASA Show will be their new range of lighting stands from the small low fold-away floor stand through the range of telescopic, tripod and flat base stands, giving heights ranging from 6" to 18ft. The stands exhibit several well engineered features such as their ability to take standard or TV spigots. All of the height adjusters are designed with special clamp mechanisms which prevent bolts tightening directly onto tubes, and are prefabricated for strength. All stands come pre-drilled to accept braked castors where required.

The largest of the Doughty stands is the Zodiac. A 125kg to 16ft winched stand which has been designed with the expertise gained in the forklift truck mast industry. This powerful and easy to use stand is already finding favour in the hire industry.

Amongst the other new products on display will be the Roller Race TV Spigot incorporating twin ball races to give an extremely smooth operation. This spigot also has a lock off feature.

Bose at PLASA

At this year's PLASA Show, Bose will be launching 2 major products - the first new professional loudspeakers since the Bose 102 Ceiling Speaker was introduced to the market 2 years ago.

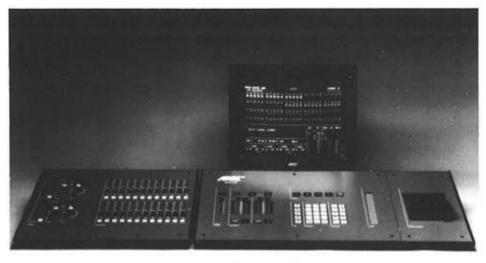
They will unveil the Proton, the new flagship of the Bose professional range and the Acoustic Cannon, a unique loudspeaker designed specifically for cinema and theatre applications.

The launches come at the end of another successful year for Bose, in which the company's dominant market position has been strengthened by a number of prestigious installation contracts. In addition to the sound systems installed during the year in many chains of retailers and restaurants, Bose loudspeakers are now being installed in venues as diverse as the Café Royal, the Tower Hotel, the QEII, Clasgow Rangers Football Stadium, and even a monastery at Aylesford!

Connexion and Image

Following the success of Arri's Image lighting control system, the larger Imagine 250 and Imagine 500 systems were launched at the ABTT Trade Show in March this year. The response has been dramatic, and with production getting into swing at Arri (GB)'s premises at Heston, ten Imagines have so far been ordered for theatres, TV studios and hire.

Theatre credits include the Clasgow Citizens' Theatre, the Half Moon Theatre, and the Key Theatre, Peterborough. In the television world, Tyne Tees Television's new pop programme, The Roxy, is being lit with the new Arri system, and Norwegian Television have ordered two systems



The Arri 'Image' lighting control system with 'Connexion Plus' backup and effects system.

for a major studio refit in Oslo. The first hire company to offer the Imagine 250 will be Playlight Hire, in Manchester and London.

Tim Burnham, general manager of Arri CB's lighting control division told L+SI that all their planned production of the new Imagine is sold up to the end of August, and that their Autumn production plan has been increased to meet expected demand for the new system.

Footnote: some of our readers would have noted an error in our article in last month's issue. The new system at Hampstead is an 'Image' - not 'Imagine', and the photograph captioned 'Arri's new Connexion Plus' was of course the Connexion Input Module, Output Module and Remote Control Unit.

Photokina 1988

Exhibitor bookings are coming in earlier than usual for the 20th Photokina in Cologne in 1988. Just seven months after the last show closed 80 per cent of exhibitors had already reserved a place for the next event, scheduled for 5th to 11th October 1988.

New MD for Strand Europe

Michael Jukes has been appointed managing director of Strand Lighting (Europe). He will be based at Strand Lighting's offices in Brentford, West London, and have responsibility for all Strand's operations in Europe, including the business units in the UK, France, Italy and West Germany and the manufacturing plants in Scotland and Italy.

He was formerly managing director of Amthenol for the past two years, having spent the previous eighteen years with ITT Cannon, latterly as managing director.



Michael Jukes.

First Orion

Lancaster can now boast one of the most sophisticated AV presentations around. Mike Sweetland Lighting, have produced a 30 minute AV Show presented in the round tower atop Lancaster's Ashton Memorial (it's imposing building everyone can see from the M6 and the railway that towers over the town).

The show uses nine Kodak carousel projectors and a Zero 88 Orion Controller gives smooth 'fade ups' of theatrical lanterns. The AV show alternates between screen slides and illumination of various mannequins dressed in the style of the period to tell the story of Lancaster from Victorian times through to the First World War. The culmination is a convincing battle scene of lights, flashes and searchlights as the trenches of the Great War take on the towns people.

Zero 88's David Catterall told L+SI that credit must go to MSL for taking a new machine, Zero 88's Orion Controller, and applying it in an area of the industry often avoided as 'foreign technology'. "The results speak for themselves," he said. "A straw-poll of people leaving the show revealed comments like 'rivetting' and 'full of life'."

Hilton's Biggest

Billy Joel's two-week tour of Russia which commenced on July 19th provided Hilton Sound with their biggest ever single contract. The main concerts, which take in three nights each at the Moscow Olympic Sports Stadium and the Lenin Sports & Leisure Complex (plus an anticipated two days in Gorky Park) are being filmed. And the whole tour is the subject of a video documentary.

Hilton Sound were called in by world-wide tour co-ordinator, New York based Dalrymple Productions, to supply digital recording and processing equipment for the three audio systems. Each looks after different and very specific aspects of the film and video making. The main task has been to completely re-equip the Fleetwood Mobile, which is recording the concert sound-tracks. Hilton supplied multitrack and 2-track Pro-Digi format tape machines were installed, plus a whole line-up of digital outboard processing gear.

The other two systems are assigned to documentary-making roles, and designed for easily mobile, one-man operation. One, dubbed the Club Rig, is centred around Trident Flexamix consoles paired with Akai MG1212 12-track recorder/mixers. The other is the portable, self-contained Sony F1 system of digital audio processor and companion VTR, which will be used primarily for on-the-move interviews.

"The tour is an organisational monster," Andy Hilton told L+Sl. "Not just because it's Russia, but because of the precise and complex co-ordination needed between the various film, video and audio production units to ensure everything links together and runs smoothly, and at the right time. These factors all contribute to the tour being the highest value single job we've ever secured, particularly if you take into account the relatively short time period."



The Chorus Line

The fifteen-month UK tour of hit musical 'A Chorus Line' nearly came to an embarrassing halt at Darlington Civic Theatre recently when it was discovered there was no room for the nineteenpiece orchestra. Thanks however, to the initiative of the crew from Paul Farrah Sound - which is supplying and operating the tour's PA rig - the show went on as usual, the audience blissfully unaware of earlier goings on.

An essential of 'A Chorus Line' is that the orchestra should be hidden off-stage and there was literally nowhere in the small 600-seater Civic to accommodate them. Fortunately, the crew discovered that the landlord of the Greyhound pub across the road was amenable to letting out

one of his rooms!

So in double-quick time, and with the local Fire Brigade providing a turn-table ladder to string a strainer wire across the road - which had to be closed - Paul Farrah Sound ran five 100m runs of multicore from the band to the auditorium, and return audio/video foldback feeds back again to the pub!

Curtain up, and the system - a combination of NEXO, Martin Audio and Bose speaker systems driven by C-Audio and Yamaha power amps - worked like a dream. And whether or not the genial ambiance of the local hostelry had anything to do with it, the band preferred playing in a light, airy function room to being closeted, as is usually the case, under a theatre's stage or in the scene dock!

Having plucked success from dire necessity, Paul Farrah did it all over again - by choice - when 'A Chorus Line' played the Grand Theatre in Blackpool

Thailand to Europe

Manufactured in Thailand and distributed and serviced throughout Europe from Zurich in Switzerland, is a new series of lighting control units under the 'Profile' banner.

The SLD 2000 is a sound to light dimmer (2kw) for rack mounting which can control various lighting units including neon and also modulate with music. It includes a 'flash' key and a 'blackout' switch.

The SCC 4000 is a 4 channel chaser (4 x 1kw) with six programmes for control of ropelights, Par 38's and pinspots etc. It also has a modulating

A super matrix controller, the SMC 4x4 and 8x8, giving either 8 or 16 channels, provides 80 storable programmes.

Finally, the Profile Soundscanner is a small unit for low budget installation work and consists of a mirror mounted on a music-synchronised motor beamed with a Par 36 6 volt lamp.

For full details and demonstrations contact Profile', Europavertrieb, Hildastr. 1, CH-8004 Zurich.

New Director at Autograph

Roma Skinner has joined Autograph Sales as a director after 16 years with Expotus. As sales and marketing director with Expotus she was primarily responsible for setting up and maintaining a European distribution network for several prominent UK pro-audio manufacturers

In the past five years Autograph Sales have established Meyer Sound Laboratories' products in Europe through close contact with the end-user and a carefully serviced dealer network. Roma Skinner's appointment will assist Autograph Sales to continue and extend the services offered to their existing dealers and open new markets for Meyer products, say the company. Autograph are also currently considering sales and distribution of product lines compatible with the professional market areas where Meyer is placed.

Concord Taken Over

Lytemode Limited - a new joint venture between GTE Rotaflex and Genlyte Inc. of the USA - has announced that it has taken over the business of Concord Controls. Concord Controls Limited was formerly a joint venture between Rotaflex and Prutec. Genlyte Inc. and GTE Rotaflex have had a long relationship through their respective sub-sidiaries Lightolier and Concord Lighting.

The new company will offer new products for architectural lighting control, based upon advanced microprocessor technology developed by Genlyte in the USA as well as continuing to serve

its existing markets.

David Brett, former managing director of Concord Controls and new chief executive of Lytemode Limited told L+SI: "Access to these exciting developments enables us to offer the UK and European market-places a full range of lighting control products. Our existing products, in particular the Green Ginger range of stage lighting systems, will also benefit from the reorganisation of the company. We are confident of a very exciting and profitable future for both our customers and ourselves."

Lytemode Limited will occupy the former premises of Concord Controls in Milton Keynes.

The New Carlsbro

As from the 1st July, 1987 Carlsbro Sales Limited and Carlsbro Sound Equipment ceased to exist and have been incorporated into Carlsbro Electronics Limited. The last few years have seen a considerable expansion in the company's business and in planning for future growth it was felt necessary to rationalise and simplify the company's operation, L+SI was told.

There has been no change in business or marketing policy, ownership or management of

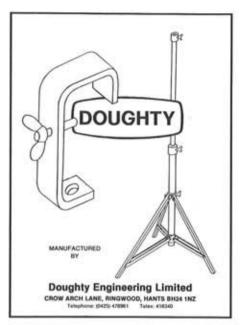
the company.

Big City Lights

Latest news from Sound and Light Productions is the growing succes of lighting subsidiary Big City Lights since the appointment of Beverley Drew - well known for her energetic and enthusiastic management style.

"Despite Big City Lights being a fresh name in lighting hire I have been amazed by the number of customers that have called purely on word of mouth recommendation," Beverley told L+SI.

Reflecting Sound and Light Productions commitment to find the solution to any problem and



work in all areas of the market, Beverley recently organised lighting for the European tour of Christian heavy metal band Stryper. The problem was to accurately reproduce at very short notice the unusual design of top US lighting designer Will Twork - complete with a 'blazing' cross that descended impressively from the roof of Hammersmith Odeon during the closing minutes of Stryper's show.

Justifying the name Big City Lights the company has just completed a round of the major London venues providing lighting services for Christy Moore at the Albert Hall, Capital Radio Rock Week at the Odeon, Capital Radio Jazz Week at the Festival Hall, The Biggest Junior Disco in the Finsbury Park Supertent and Placido Domingo at

the Wembley Arena.

Sound and Light Productions' next major job is the supply of full technical services for this year's Peterborough Country and Western Festival starring Johnny Cash and Kris Kristofferson, Meanwhile, Jan Goodwin is shortly off to the United States to put the finishing touches to negotiations for some exciting work with American artists who will be visiting Europe later this year.

Note: In our July issue we gave a wrong telephone number for the companies on page 8.

It should read 01-579 2748.

Fane Acoustics Inc

Following a record-breaking showing at the N.A.M.M. show in Chicago, Fane have decided to open up their own U.S.A. subsidiary, Fane Acoustics Inc., located in Chicago. A substantial warehousing facility and the establishment of a nation-wide sales and service network will ensure delivery to all customers within, at most, 48 hours, Fane told L+SI.

Dyna-Might from TSL

Watch out for news of the "quietest colour change unit" - a pan and tilt yoke designed to fit most lanterns - and available in the UK through Drury Lane based TSL this month. Already tried and tested for a year in the States, and manufactured by Dyna-Might of Misouri, TSL will be sole UK distributors. Ring 01-836 6902 for the latest news. Full information will be included in our

September issue, together with information on other new developments at 67 Drury Lane.



Control and Effect

Brian Davies reports on the first 'Light Jockey of the Year' competition



Richard Gibbons (left), winner of the Light Jockey of the Year Contest receives the congratulations of Disco & Club Trade International's managing editor Jerry Gilbert.



Theo Loyla - compere for the Contest.

Friday 3rd July saw the gathering of ten hopefuls for the finals of a new competition, Light Jockey of the Year, organised by Disco & Club Trade International and sponsored by installation specialists Avitec. The venue chosen was Le Palais in Hammersmith, featured in last month's issue of Lighting+Sound International.

The final was the culmination of several months of travelling around the regions holding heats. These ranged all over the UK, and the ten finalists came from as far apart as 'Liverpool in the North West, Newcastle in the North East, Bristol in the South West and Swansea in Wales. Interestingly, there was no one from London or the South East!

The ten finalists were invited to Le Palais during the day in order to familiarise themselves with the lighting desk, which as reference to last month's L+SI will show, is very complex. Each competitor was given a complete run-down on the controls which included smoke machines and, for those who wanted it, the two video screen walls. In the event only three of the contestants chose to use the video screens, which in my opinion was a mistake as they greatly enhanced the light shows produced, adding a new visual dimension.

Unfortunately, with ten contestants taking part, each was only allowed a comparatively short time on the console, although they did get to have more than just one run-through. Additional assistance was given by Lisa, the principal resident lighting jock at Le Palais, to each contestant during the competition. This was essential to remind the finalists where the buttons were for the effect required. Just six minutes was allocated to each entrant who was introduced to the audience by disco industry personality and compere Theo Loyla. Due to the very short performance time allowed, choice of music was very important, and in my opinion several competitors let themselves down badly by their particular choice.

The eventual top three places went, significantly, to the only three who took the trouble to dress up for the occasion. The

winner, Richard Gibbons from The Studio at Bristol, dressed in period dress uniform, whilst second placed Carl Dodds of the Powerhouse Birmingham was in bow tie and tails. Third placed Keith Dallison from Sweetings in Bedford donned a ringmaster's outfit.

In spite of unfamiliarity of the equipment, all contestants did well, but the top three were that much better - using more of the available effects and matching their show more completely to their chosen music which in each case was both punchy and well known.

All in all it was a most enlightening and entertaining event, and I am already looking forward to next year's.

Organising trio for the event was Jay Green and Jerry Gilbert of Disco International with Avitec's Tony Kingsley. Jerry Gilbert told L+SI that the event will be held again in 1988, although there would be a few changes in format. It was also likely that the event would have an international flavour in 1988.







Avitec's Tony Kingsley presents cheques to second placed Carl Dodds of Birmingham Playhouse (left picture) and third placed Keith Dallison of Sweetings Bedford.

Coals to the Kirov

Graham Walne talks to Tom MacArthur about the logistics of touring with the Royal Ballet, most recently to Japan and Russia.

Large scale touring is hardly a new subject for L+SI, which regularly features the work of those behind the supergroups, who have become very efficient in transferring highly technical productions from place to place. Theatre in particular has learned much from their techniques, the application of chain motors being a typical example. But even people in this area are likely to be daunted by the shear scale of the Royal Ballet's touring operation.

The company's recent tours to Russia and Japan involved 50 tons of equipment spread over nine containers. The Royal Ballet's invasion force marches not on its stomach but on its shoes, all 1500 pairs, and other less artistic items include everything from Kleenex to typewriters. As Tom MacArthur explained: "Thankfully we had allowed an extra day in Moscow and we needed it because the Customs men insisted on checking every item in every case as it came off the lorry. Since we travel with so many things, the job took ten hours. If anyone else is planning a Russian tour please remember this."

When the cases were finally unloaded many items were found to have been 'lost in transit', but Tom generously suggests that they were taken as souvenirs and replacements were quickly flown out. For the record, torches seem to be the best cur-

Their recent tour was the company's first visit to Russia in 26 years, and clearly they have learned from other tours because their entire operation is self-contained, relying on the local theatre only for basic lighting and crew. Quite literally everything else is taken. The Company tour 40 technicians (in addition to 110 musicians, dancers and wardrobe personnel) including Tom MacAr-



Tom MacArthur

has worked at the Royal Opera House since 1970, having been technical director since 1976. His previous experience includes work for the English Stage Company, Bridge Productions and Rediffusion Television.



Phillip Broomhead and Lynne Bristow of the Royal Ballet pictured in Moscow's Red Square during the company's June/July tour of the Soviet Union.



Anthony Dowell and Jennifer Penney after the first performance of Manon on 9th June.

thur himself, and a lighting manager with chief electrician and 5 assistants, a master carpenter with 6 assistants, and a properties master with 2 assistants.

A board operator is also taken, and it is his task to liaise with the local followspot operators. Recalling my own lighting at Covent Garden where I had good cause to be grateful to their legendary skill I asked Tom how he found spot operators abroad. "They are fine in Japan because they are accustomed to our visits and they do take in a lot of other tours from the West that all work the same way that we do, but in Russia they don't use spots in ballet - only

in opera. Furthermore in Russia the spots were usually positioned in the stage boxes so that we needed two on each principal and it wasn't quite as successful."

The lighting rig was based as closely as possible to that in Covent Garden with 150 spotlights in use and with most of the stage bars being re-focussed and re-coloured during the intervals. The equipment in both countries was not as sophisticated as in the UK, being mostly plano-convex based, and the Company toured its own profiles and special effects. The Russian theatres also had large quantities of low-voltage beam lights which made smooth colour washes very dif-

ficult to obtain. There were some surprises, however. The mid-stage bars at the theatre in Leningrad were fitted with an ingenious remote pan-and-tilt system which accessed the relevant spotlight via a telephone dial!

In Japan the theatres all possessed virtually identical rigs so that once the crew had been shown what to do then it would be faithfully reproduced at each venue and the theatres were built to a standard format with large stages and powered flying. Although many of the grids were taken up with orchestra acoustic shells, few of the traditional ballet 'bays' were lost. Crew in both countries contrasted sharply, with Japan supplying vast numbers who worked "like a swarm of ants" and Russia being understaffed "because there is no unemployment there is no one else available". Each department had its own interpreter so that instructions were carried out virtually instantaneously, but Tom MacArthur made particular comment on the frustrating Japanese practice of holding meetings on every subject, granted however that this ultimately seemed to produce more efficient crews and a better anticipation of problems.

A sadness for the Company was not being able to tour to the Bolshoi in Moscow because it was closed for repairs. Since I am due to light at the Bolshoi in 1989 I hope it will be ready because I do not want to have the same experience of working next door at the Operetta Theatre as the Royal Ballet did. Tom told a sorry tale of a run down venue with very little power, minimal rigging equipment and no wing space. However the Company's other date at the home of ballet, the Kiroy in Leningrad was more comfortable.

A particular problem in both countries appears to have been the transport. In Russia any kind of lorry was so scarce that several times they just didn't turn up at all and only recently has Japan moved away from flatbed lorries. With only two dates in Russia to play, the Company coped quite well, but traditional Japanese efficiency was essential for the one-night-stands which were played outside the main cities.

The response of the two countries to scenery was particularly interesting. The trompe l'oeil designs of 'Sleeping Beauty' were a great source of interest in Japan which has nothing quite like it, but the abstract designs for 'Manon' brought from the Russians sympathy that the Royal Ballet couldn't afford real scenery! However 'A Month In The Country' was a great success being rather closer to home, and the Scott Joplin 'Elite Syncopations' was a triumph even though it was thought very avantgarde, the Russians never having seen painted leotards.

I don't wish in any way to sound pontifical but listening to Tom's experiences brought home to me once again the realisation of how freely music can cross every border, providing an excellent opportunity for one country to learn about another. And not just technically either.



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The Kirov, Leningrad.



Tom MacArthur (left), technical director of the Royal Opera House, with Yuri Grigorovich, director of the Bolshoi Ballet.



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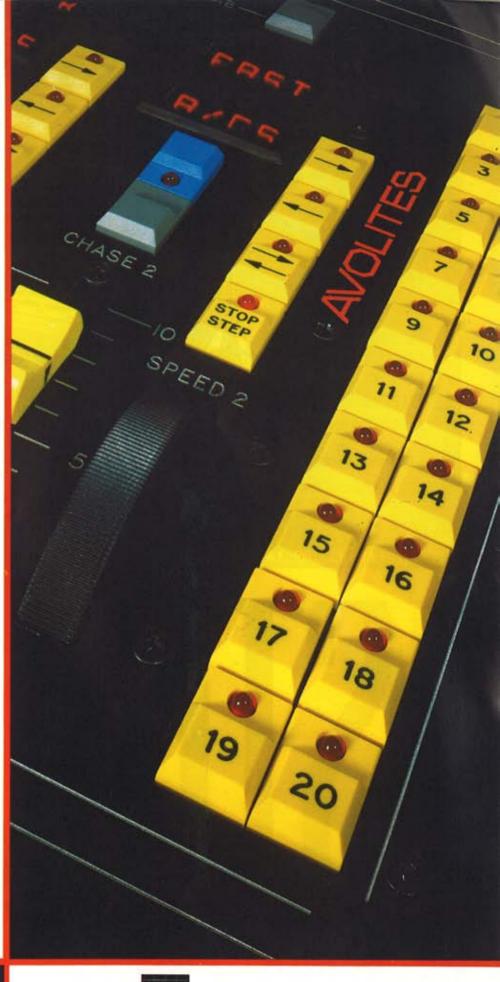
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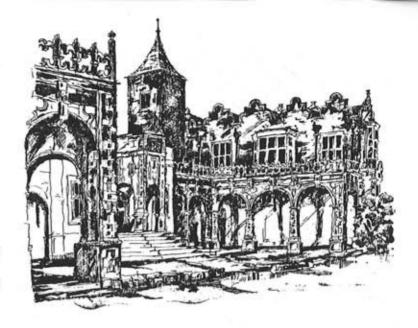
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ASTRALLOY

Under Cover Operation

John Offord talked to Peter Hart and Chris Corner under cover of the new canopy of London's Holland Park Open Air Theatre whose season opened on July 3rd.



With the demise of the GLC in April 1986 the Royal Borough of Kensington & Chelsea took over responsibility for Holland Park, one of London's most attractive open spaces, and with it came the challenge of mounting the various arts activities taking place in the Open Air Theatre, the Orangery and Ice House.

A programme of improvements has been undertaken for all three venues, the major one being the theatre's impressive high tensile canopy. The new canopy offers an exciting and creative solution to the problems of the typical British Summer and has given a new lease of life to the theatre. (The six hundred seat venue is one of only two open-air theatres in London and a Grade One listed building.)

The project was a first commission for Soft Shells Ltd., which specialises in the design, fabrication and erection of high-tensile structures. Three white tapered steel masts support the entire structure, the perimeter of which is tensioned by steel cables to anchors sunk 10 metres below ground level. The canopy covers an area of about 1,100 square meters.

The concept of the high-tensile structure originated in the work of Frei Otto in the 1950's, and using the principle of achieving more with less - that is less effort and material - he focussed his investigations on one of the main forces existing in all structural systems - tensile stress. Instead of a conventional building system dependent on forces in compression, he developed a structure where only a few elements such as the masts are under compression while all the others are under tension.

Technical co-ordinator for the Holland Park Theatre project was Peter Hart, now something of a specialist when it comes to 'protecting' out-door events. I spoke to him shortly before the opening night of the season on July 3rd.

"There is something strangely masochistic about the British Theatre audience. They are determined on occasions to enjoy themselves when the odds are stacked against them - indeed, they seem to enjoy it even more. Without this national characteristic I am sure we would never have open-air theatre in this country at all, and unfortunately even with this determined en-

thusiasm a high proportion of out-door performances are lost.

"However, Holland Park Theatre has come up with a solution that should confound the weather, without losing the romance of open-air performance. Although covering a very large area, the canopy is not totally enclosed, so an 'open' feeling is preserved. At the sides it stops 3½m above the ground and at the front and back it sweeps up to around 8m."

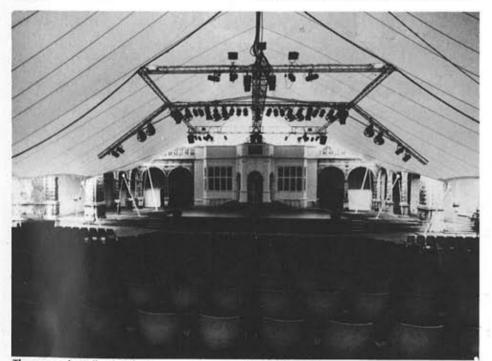
The canopy is **not** a tent. There is no internal structure to hold it up, and therefore there are no obscured sight-lines. The masts are all external, reaching a height of 26m. The lack of any internal structure does pose some difficulties because it means there are no obvious places to put lights, speakers, and so on. The solution arrived at was to suspend a truss system from the two peaks of the canopy where they are held up by the high tensile structure.

"This is not an easy solution to work with," explained Peter Hart. "How many theatres could fly all their lights and speakers from just two points? Further complications were an overall weight limit of 1½ tonnes and that there could not be any resulting forces that would distort the shape of the canopy. In English this means that suspension points must hang vertically and that everything hung symetrically, right down to the cabling. This was not as simple as it sounds."

The man in charge of lighting design and installation was Chris Corner of Theatre Technical Services, who had the physical problem of coping with rigging the truss, which consisted of 78' of Telestage and 52m of Astralite. "It was simple enough to work out where to place the necessary equipment, but the problem was how to actually go about rigging it," said Chris Corner. "As the trussing lay suspended at a conve-

"As the trussing lay suspended at a convenient rigging height on just two chain hoists, one at either end of the centre line, with a this stage no bridges or stabilising wires in place, one lamp too many on one side meant that the whole assembly would tip gently but disconcertingly. Two rigging teams working evenly out from the centre was the logical solution."

The stage of the Theatre is backed on three sides by the Jacobean frontage of the remains of Holland House - a series of collonades around a central portico. An important part of the design brief was to make this splendid setting look even more so after



The new-style Holland Park Theatre - 600 seats under a high tensile canopy with no internal structure. Good for sight-lines, but a problem for rigging lighting and sound equipment.

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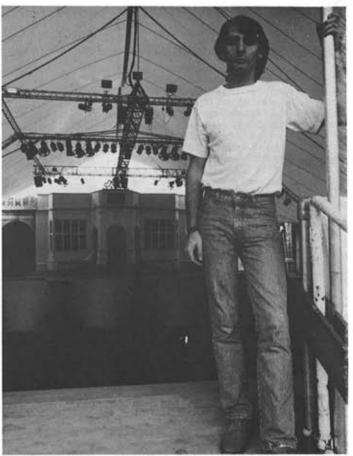
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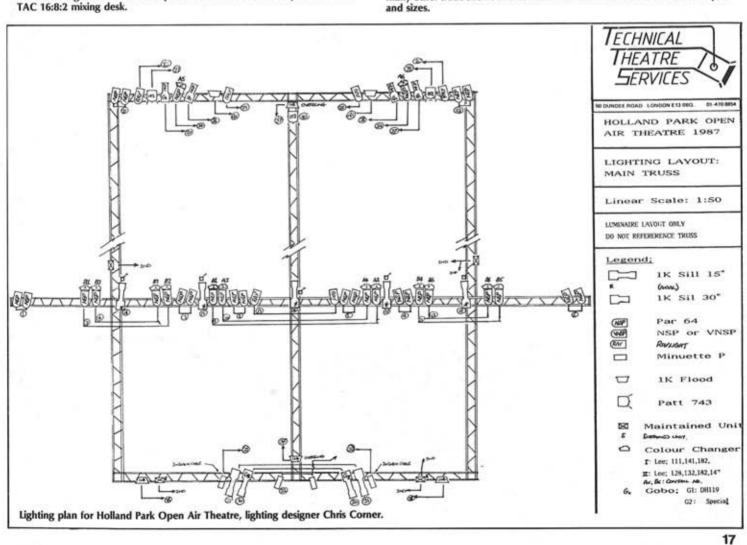
Lighting designer CHRIS CORNER of Technical Theatre Services (foreground) found that working under the new canopy at Holland Park Open Air Theatre created an interesting problem for the lighting operator. There has to be a constant awareness during the early evening until direct sunlight has gone, and the operator has to regularly adjust for the sun hiding behind clouds and then suddenly appearing. He must also carefully create the magical effect when changing from dusk to full artificial light.

Lighting controls shown above include 2 x 6 way CCT Colourchanger controllers for the 14 MX colour wheels, 2 x 20 way Green Ginger 3 preset 3 group for the main stage and auditorium lighting and an 18 way Rank Strand Mini-2 for control of all ancillary and 'house' lighting in the Park. Dimmers employed are all Rank Strand.

In the background Tim Witherspoon of Hardware House is pictured at the



PETER HART, technical co-ordinator for the Holland Park Open Air Theatre, has been a free-lancer for seven years and prior to that worked for several modern ballet companies touring the UK and overseas. In recent years fate has conspired to keep him under canvas for a large portion of his working hours, looking after shows ranging from Circus for the BBC to The Bolshoi Baltersea Park and London Fashion Week coupled with many other trade shows and conferences - all under cover of various shapes and sizes.



Hackney Cabs at Holland House

The Hackney Cab loudspeaker system supplied by Hardware House for the Holland Park Open Air Theatre was designed primarily as a compact, high quality, high power vocal reinforcement system. The design goals of small box size, wide bandwidth and high midband efficiency have been met by selecting components with a high natural efficiency in the mid-range (300Hz - 3KHz) and electronically equalising the frequency extremes to give a flat frequency response from 65Hz - 18KHz.

Careful attention has been paid to maintaining a smooth dispersion pattern and eliminating any sharp peaks in the frequency response, thereby greatly simplifying the task of system set up and equalisation, and providing maximum gain before feedback in a live situation.

The Hackney Cab is a bi-amplified speaker with a dedicated controller providing electronic equalisation as well as frequency division, phase alignment and driver protection. The controller is a dual channel, 1U standard rack mounting unit.

A low profile wedge version of the Cab is provided for stage monitoring, using the same control electronics and amplifier racks as the standard version. A sub bass unit extends the low frequency limit (from 65Hz down to 33Hz) and allows greater clarity and punch at higher levels.

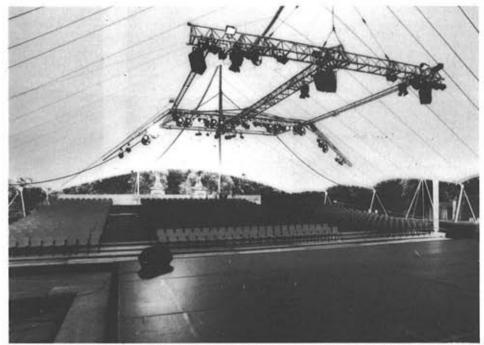
"We incorporated a variety of break-up gobo and colour projections on to the portico with more traditional architectural uplighting of the columns and specials to pick out the finial above the portico. This provided a choice of suitable backings to suit the wide variety of the season's programme," explained Chris Corner.

"Another important part of the design brief was the lighting of the canopy itself. This impressive and stylish structure is made to look all the more dramatic at night. Uplighting into the roof void stresses the size and height, while streams of light emphasise the flowing lines. The outside of the canopy is similarly lit while the long line of the canopy edge is followed by a continuous line of small golf ball bulbs.

"Attaching the festooning provided yet another challenge. After experimenting with Velcro and various tapes, the answer proved to be nothing more esoteric than a line of

bulldog clips!

"Another problem to be solved was meeting the 16' rule for overhead cable runs. The multicores coming down from the trussing has to bridge a 15' wide path in order to reach the metal hut in which the dimming is housed. A catenary wire stretched between braced and supported scaffold poles proved suitable for the task, but it was clear that it could not carry the much heavier 100 amp 3 phase supple cables from the



View from the stage of the Holland Park Open Air Theatre. Lighting and sound control is positioned at the rear of the right hand bank of seating.

roof of Holland House across a much longer gap.

"Here we built a catenary system out of vertical and horizontal aluminium scaffold poles braced at each end. This free-standing system required no fixing to the fragile masonry of the House, but still provided all the strength of support necessary."

A double supply was laid into the dimming hut and to feed sound during the performances a separate second 30 amp supply was used to provide as 'clean' a source as possible. This supply was then switched over to feed a selection of the 'house' lighting to act as security lighting during the night, allowing the main supply to be isolated when not in attendance.

During fit-up, Chris Corner and his team had two major headaches to deal with. The perpetual rain of the first week threatened to engulf those parts of the installation not protected by the canopy, whilst during the second week the sweltering sun threatened to

engulf the electricians.

The most time consuming part of the installation, and a major part of the work was the provision of a large network of maintained lighting, exit sign units and 'house' lighting. In all there were at least a dozen units in use providing emergency lighting to the exit routes that stretched from the Theatre to the rear of the Park. "With no convenient walls or roof to attach to, much ingenuity had to be exercised in mounting these in the correct places. They were hung from trees, attached to railings, or even suspended from free-standing scaffold structures," said Chris Corner.

As always with an open-air site, the distances for cable runs are enormous, and the emergency lighting units arranged around the edges of the site exacerbated this. In all, well over 1km of 13A cable was laid in addition to several hundred metres of multicore.

A simple technique was employed to protect connection points. "We devised a simple snap-over waterproofing box for covering connections," explained Chris Corner. "Past experience on open-air work has shown that binding up connections in say plastic sheeting usually results in condensation and can be as bad as nothing at all. We therefore left vent holes (positioned so that rain water could not get directly in) to allow air circulation."

All these 'extras' cost a great deal of money, and only half of the lighting budget went on the stage lighting itself. The rest covered the cost of all the emergency, access, and decorative lighting involved in setting up a safe and attractive complex in which to set the show.

At least 250 man hours went into providing the lighting for what is one of the most visually exciting settings for an open air theatre season that provides a vast mix of entertainment including cabaret, drama, opera and dance.

Sound Equipment:

Amplifiers: Two PSA 2's in bridged mono mode driving the bottom end of Hackney Cabs, DC300A driving the top end. Controlled by dedicated Hackney Cab controller/crossover. DC300A driving monitors.

Speakers: 4 Hackney Cabs flown on truss. 2 Eastmill monitor wedges.

Mixing Desk: Total Audio Concepts (TAC) 16:8:2.

Outboard equipment: Yamaha SPX90 effects panel, Teac C2 cassette player/recorder, DBX 160 compressor/limiter, Formula Sound S19G graphic equaliser.

Microphones: selection of Shure SM 87's and SM58's, Beyer 201's, AKG G12.

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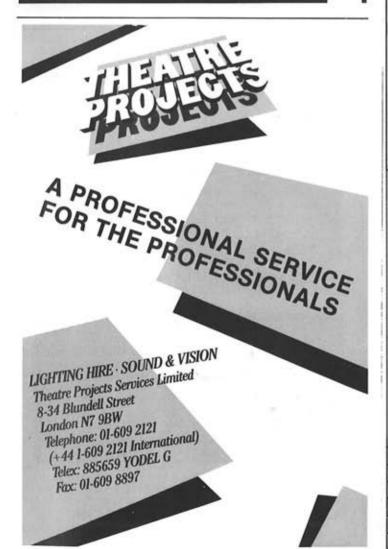
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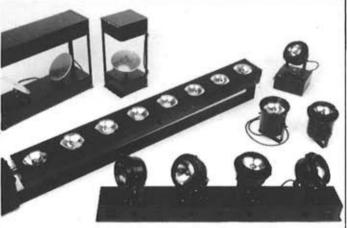


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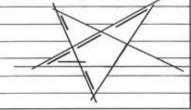
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Another new lighting desk I hear you cry! 'Didn't you report that there were 38 systems at the ABTT Trade Show this year? How can you pretend that yet another one is worth an article?'

I don't need to pretend, this one is different. This one changes the way we will think about control systems. This one offers the kind of control we will need when the spotlights come out of the Ark. Current lighting systems with dedicated keyboards cannot really be upgraded and QWERTY keyboards aren't really fast enough. This new system avoids those pitfalls because it has no buttons.

The new system I'm raving about is the brain-child of Tony Gottelier, and it stems from his frustration at not being able to find a control small yet flexible enough for Camden Palace. He talked the problem through with Mick Martin and Rowland Hughes who had just formed Axon Digital Design and six months later 'Oska' was born. The name is an abbreviation of Matrioska which is what those Russian dolls are called that fit one inside the other - the suggestion being that Oska has hidden delights.

On Oska the buttons have all been 'replaced' by a touch-sensitive television screen and as far as I know, no other lighting control system has this facility. Furthermore, Axon have come up with a screen which has a lower cost and a more positive action than many other existing touch screens in other applications. The Oska screen will display in colour all manner of 'keys' and data; 'Help' menus offer advice although the display is already quite clear, and it is likely to improve even further.

The absence of buttons means there can be several software options and the 'keys' and display will adjust automatically to suit the appropriate option. The desk I saw was designed for the disco market and the first installation will soon take place at 'Zig-Zag' in Aberdeen. Since I am theatre orientated,



Tony Gottelier (left) looks on as Pulsar's Ken Sewell unties the red ribbon and shiny black packing to reveal the new 'OSKA' lighting control system.



Tony Gottelier and Mick Martin discuss the new system with Pulsar's dealers and invited guests.



Tony Gottelier - a proud day with OSKA.

copious notes were being made from my comments and added to many others culled from Pulsar's recent dealer launch as a prelude to producing a rock board and a theatre board, in each case using some of the disco facilities but adding others more appropriate to each market. Indeed some adjustments had already been made to the system from the earlier comments. The openness of the designers and their ability to listen and ask questions in this way is refreshing and a contrast to those who declare straight off that their product has all the answers.

Readers will have an opportunity to see Oska at the PLASA show in September, but meanwhile let me give you a closer look. The desk will control 256 items, be they dimmer channels, cues, groups, motors or chases. Each item is accessed by touching its key on the screen and an optional menu can



Mick Martin, Roman Walanta (W.B. Lighting), Pasquale Quadri and Julio Savoldi (Clay Paky, Italy) discuss fine detail at Oska's Cambridge preview.

list the content of each key in each mode, useful in non-theatre situations where channel numbers are usually replaced by names. 32 keys can be displayed simultaneously, and for those who think that accessing the next 32 and so on might be too slow, I would remind you that Thorn's keypad was thought too slow when that first replaced individual controls, and now it's a standard item. Essentially there is nothing to prevent a theatre-Oska from having a touch keypad if necessary.

Below the screen is a panel housing 16 digital fader wheels with bar graph displays. These adjust speeds or intensities of each of the items displayed, again be they dimmer channels, cues, groups, motors or chases as required, and the faders return to us the smooth feel we used to enjoy from quadrant faders years ago. The output of the system is stored on conventional disc and the whole

desk occupies a space only 40" x 33" - and that includes ample space for plots and ancillary items. Peripherals can be daisy-chained via multiplex off the main system so that stalls controls, printers and modems for servicing are all planned.

The response time of the controls is measured in microseconds, essential in today's disco market and possibly important in other markets too, as new light-sources become available. The operations all function in 'real time' so that no 'action' or 'enter' pushes are necessary. Alterations are made to the stage picture but all functions can be set up blind in 'preview' and then brought on stage in the conventional manner if desired.

I salute the courage of Oska's design team and the foresight of Pulsar who will distribute the system. Oska is full of hidden promise, and as long as its creators listen to its dealers and users, that promise should be fulfilled.

OSKA's Pedigree

If fully computer-based lighting systems have not as yet gained widespread acceptance with the majority of lighting designers and operators, it probably stems from their often inflexible nature. After all, speed and precise timing are the very essence of performance lighting, which dictates a hands-on type of control system.

The QWERTY method of programming, often intrinsic in such systems, does not provide the direct access to lighting channels that most users expect from manual or hybrid memory systems. Great for pre-programming cues, the QWERTY is usually shut away once the performance starts. Only in straight theatre has computer lighting control so far gained widespread acceptance where the lighting action is rather more sedate and instant flexibility and speed of response is an everyday requirement.

Pondering these problems in 1981 Tony Cottelier, who was in the midst of conceiving the eclectic Camden Palace light show, decided to take the bull by the horns and find a solution, starting from stratch with a radical new concept.

"I was faced with a lighting system which demanded over 200 individual separately controllable channels," remembers Tony, "and the brief demanded a mixture of rock, disco and theatre lighting, The space required at the time to accommodate two six foot rock desks, or a mixture of controllers, ruled existing equipment out, apart from which none provided exactly the facilities I needed."

He took the problem to two ex-colleagues, Mick Martin and Rowland Hughes, who by then had formed themselves into Axon Digital Design. Fascinated by the prospect they set about the development work enthusiastically, and within six months came up with a prototype to Tony's specification.

"What was mind-blowing at the time was that we were able to control 256 channels of lighting from a desk only 500 x 600mm in size," said Tony, "and the amazing thing is that nobody else in the business picked up on it. It's only now that other manufacturers are catching up with that early concept. Mick found a brilliant solution to the ergonomic problem by inventing transposable keyboards and digital fader wheels so that 16 presets and touch keys could regenerate themselves in memory to provide over 25 controls with real-level memories! And as I didn't want to programme from a QWERTY he found a direct input solution to this too."

A built-in monitor provided preview information and prompt sheets. "It was when we realised that this mimick monitor was making only a limited contribution, that the inspiration emerged for OSKA. But even then, all programming in the system is done in real time working from the actual lighting controls rather than from a data input system."

OSKA is described by Pulsar Light of Cambridge, who are to distribute the system, as the 'total lighting controller'. "When Tony first talked to us we were impressed enough by the capabilities of the Camden system, but when he hit us with Axon's touch sensitive television screen, to replace both the monitor and the keyboard, we were knocked out," explained Ken Sewell. "What a solution to the problems of operating in a dark and hostile environment!"

What really convinced Pulsar of its viability was OSKA's intrinsic flexibility, and vast control power from such a small package. 256 channels of lights, soon to be doubled to 512, can be controlled in five different modes, from seven different clockdrivers, all from a colour monitor and 19 inch digital fader unit. Furthermore the facility to programme directly from the lighting controls inlive, rather than from a QWERTY keyboard, is bound to appeal to the vast majority of lighting people who, like Tony Gottelier, are very definitely in the hands-on mould.

For computer buffs the OSKA system has 280K of operating memory with over 156K of graphics in addition and the high speed responsive structure is achieved through triple processor architecture. Although 24K of software has already been written for the basic system it is intended to offer a series of software add-ons to further extend the

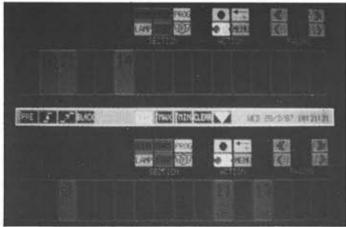
facilities, via an expansion bus.

The OSKA system is available in 'hi-fi' format for console mounting, or without the dimmer control for the disco market, or in a splendid touring console which is a '21st century design' based on the

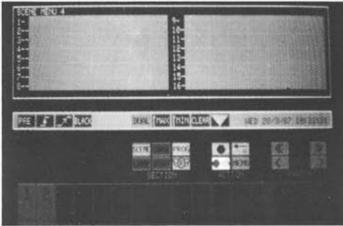
style of antique military chests.

Five years on since Camden Palace opened,
OSKA looks likely to walk off with all the Oscars at
this year's PLASA Light and Sound Show at Novotel
in September.

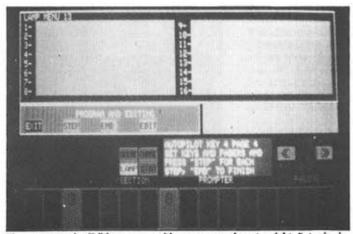
The OSKA 'Magic'



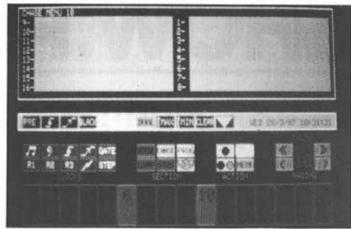
Two 16-way keyboards may be displayed at one time. In this case two 'Lamp' keyboards represent 32 output channels out of a possible 256.



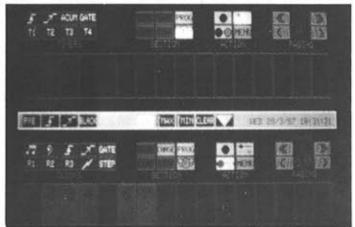
The 'Scene' facility enables recall of complete lighting states.



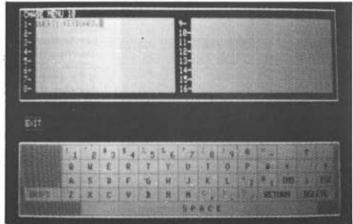
The programming/Editing screen with memo panel centre right. Entry is via the 'Lamp' keys and digital fader wheels below (not in picture).



One of 16 'Chase' keyboards with relevant prompt screen displayed above.



Two different modes can be operated together. In this case 'Chase' and 'Autopilot', a super-sequencing facility.



The on-screen QWERTY is used solely to enter prompts and legends.



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PLASA Numbers Up

A well-attended Annual General Meeting of the Professional Lighting And Sound Association held at Novotel Hammersmith on July 2nd, heard chairman Peter Brooks report that membership was now up to 89 companies (up from 62 in 12 months), and treasurer Ken Sewell speak of nett assets of over £115,000.

And with the amount of activity now undertaken by the Association in financial terms, with a massive growth in the exhibition due in 1988 and the taking over of L+SI, it was paramount that PLASA got its own house in order before too much was taken away by the Revenue. Both Peter Brooks and Ken Sewell reported to members in some detail of research and discussion with professional advisors as to the future status of the Association.

As Ken Sewell said: "Taxation law and practice as it relates to associations engaged in mutual trading is a complex subject, and some of the proposed changes in the constitution will reduce the future likelihood of taxation disputes."



Tony Akers, PLASA's new vice-chairman.

Ken Sewell also reported that the 1987 exhibition is on target, and that the magazine was achieving sales targets, and should achieve the objective to make a contribution towards the extra overhead of setting up the permanent secretariat. He anticipated that the nett effect of the magazine and secretariat would be broadly neutral on the overall financial position of the Association.

The only significant expense not budgeted for in 1987 was money spent on publicity and public relations for the 1987 Light and Sound Show. "The particular aim," explained Ken Sewell, "was to expand general interest in the Show for the benefit of exhibitors. In addition, the stage will be set for 1988 when the exhibition moves to Olympia 2. Public relations expenditure during 1987 will help to make the 1988 Show a success, so it should be viewed as an investment for the future."

The Association's treasurer also felt that the piling up of surplusses was not a valid long-term objective for PLASA. "In future, surplus funds should increasingly be put to work for the benefit of members. The setting up of the Eastbourne office with its permanent



AGM top table close-up (left to right): Tony Andrew (secretary to the Association), Sandra Scott (PLASA office), Martin Prescott, Ken Sewell, Peter Brooks (chairman), John Lethbridge, Tony Akers, Rob Peck, Roy Millington, Tony Kingsley and David Neale.

staff gives us the machinery to expand the Association's activities, making it a focal point for the lighting and sound industries in this country, and helping member companies to grow and expand in markets both at home and overseas," he concluded.

Chairman Peter Brooks detailed two resignations - David Neale of Disco International, from the Executive Committee, and John Lethbridge of Cerebrum Lighting as vice-chairman, who will also resign from the Executive Committee in September. "As one of the architects of the major changes to the Association in the last year or so, John Lethbridge will be sorely missed," said Peter Brooks.

The new vice-chairman of PLASA is Tony Akers, and David Bearman of Turbosound was co-opted to take the vacant place left by David Neale's resignation. Peter Brooks introduced the new secretary to the Association, Tony Andrew, and also Mrs Sandra Scott who assists both Tony and L+SI editor John Offord in the new Eastbourne offices.



John Lethbridge, standing down due to frequent overseas business commitments.

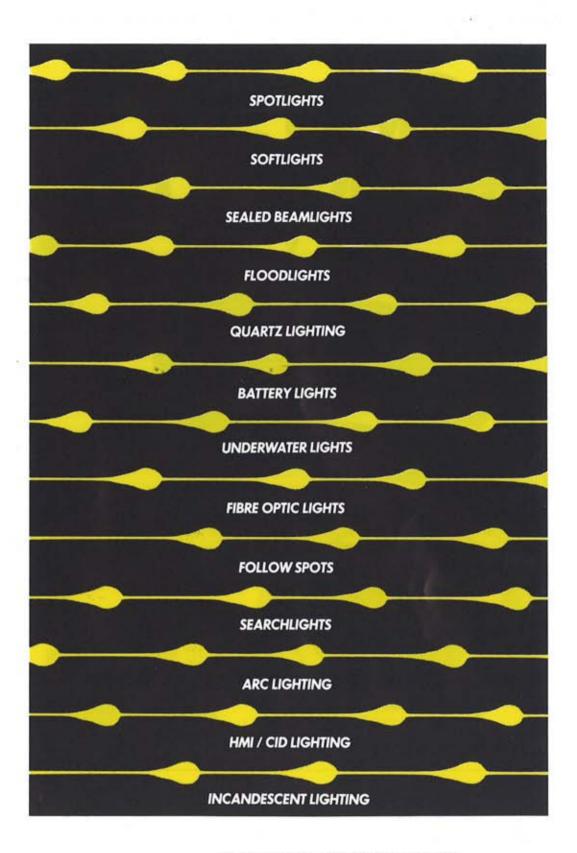
Major topics discussed at the AGM included regional trade shows, and adoption of the new constitution, coupled with membership status.



PLASA's 1987 Annual General Meeting in progress at Novotel.

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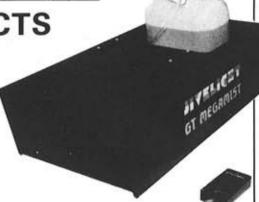
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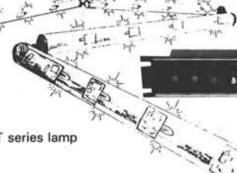


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ON TOUR Keith Dale

In the last issue of L+SI, Catriona Forcer covered the Prince Show in Milan. After listening to her enthusiastic report of both the performance and the lighting I was eagerly awaiting the tour's London debut. However, due to the show's cancellation at both Wembley and the proposed Earls Court substitution, I was not able to see just how good it was. Still there's always next time - I hope.

In fact, future shows at Wembley Stadium by any performer seem to be in some doubt at the present time due to the complaints received by Brent Council. Even with the shows that have made an appearance over the past few years, playing Wembley could hardly be described as a lighting designer's holiday, as one has to contend with the natural light of the setting sun (well,

sometimes you do!).

This brings me, in a roundabout way, to the David Bowie Glass Spider Tour which did manage to get to Wembley in June. Unfortunately, it did not receive the rave reviews expected - even TVAM decided to make a detrimental comment about the lighting and stage set! This comes as no surprise though, as going on so early in the evening is a pre-requisite of Wembley performances, and creates insurmountable problems for the L.D. trying to balance the stage and effects lighting with that of daylight/twilight. Apparently, it was much better at Manchester's Main Road and abreout stage until around 11pm. Fortunately, for the purpose of this review, Catriona chose to see the show in Spain where she was able to fully appreciate all the subtleties of the design.

Meanwhile, the arguments over Wembley will, I'm sure, go on and on until London finds another venue for the bigger productions. Even playing the Arena at Wembley is far from ideal for both the tour personnel and the audience. Perhaps London really needs to take a good look at the

French method and in particular the excellent facilities provided by their Zeniths in both Paris and Montpellier which are ideal for anyone playing to less than 10,000 (and sometimes morel) people. Now, perhaps if we were to knock down the Arena.

David Bowie Barcelona

Catriona Forcer talks to lighting director

John Osborne

How did you start as a Lighting Designer?

I trained at University in directing, but half the time I seemed to end up doing the lights for whatever I was directing. It appeared that technical theatre paid a lot more than the artistic rewards of directing so I tended to do more and more lighting just to stay alive.

When I decided I wanted to do more lighting I moved to Los Angeles, opened a 'phone book, picked a lighting company, and got a job. I started out as the number three guy on a John Denver tour. I then became one of the lighting crew on a Diana Ross tour and when she went back on tour six weeks later I was promoted to crew chief. That was when I met Allen Branton, and through this relationship we organised the Jamaican World Music Festival together.

Who have you designed for?

The first band I designed for was Three Dog Knight in 1981, followed by a lot of unknown bands. I was crew chief and then board operator on Bowie's Serious Moonlight Tour in 1983, and I did a lot of television and video work before joining the Duran Duran tour in 1984. Since then I've worked for Herp Albert, Power Station and a few other things.

How do you compare video work to live shows?

I probably enjoy doing video work more because you can light more conceptually. During a live show there is a broad spectrum of conceptual things and then there is a lot of just practical stuff. Sometimes you have to wash out things to combine the two. But with a video you can go through it twice, and so the whole concept is more likely to ring true.

Tell me about the design for this show.

There is a certain 'Branton way' of designing which people in the business recognise. In this case it really was a team effort - Arthur Smith of Vari-Lites, C.C. Simpson, Ed Wannebo, Allen Branton and myself - although Allen certainly set the mould of how things were going to be. Allen created an environment from which the show could grow out of because he left the tour after the seventh show. It's certainly been a wonderful experience. It's different from doing your own design but it's just as interesting to try to grasp somebodgy else's and bring it to fruition. If songs are added during the tour you have to make them fit in with the original concept.

The set was designed by Mark Rabitz who also designed the Serious Moonlight Tour. Bowie is my favourite person to work for because he's a charming gentleman and also his artistic understanding goes way beyond anyone else I've ever dealt with. This is a theatrical production and it works because there is a tremendous creativity and lacking of egos. Everyone has worked very



Bowie in Barcelona.

hard to produce a show which is professional, special, different, and which has broken new ground.

What kind of equipment are you using on this production?

The rig itself is 12-sided and about 36 feet across. It has about 20 Vari-Lites, mostly 2's and some 3's. It also has about 90 Showlite's Showchangers in the rig. Around the outside there are about 24 Molefay Units with Showchangers attached. There are more Vari-Lites, mostly 3's and 2's scattered throughout the scaffolding along with 12 x 8' long MR16's and another 24 Showchangers on bars. In the 'Bug' itself, the body that blows up, there are 4 far-cycs, again with Showchangers on. The legs of the 'Bug' have three circuits, four colours totalling some 76,000 watts and this was one of the reasons for choosing two Celco Series 2 Gold boards and running them in a linked mode.

Also, Allen Branton tends to use the time cross fade function available on the Celco boards whereas before he has had to use a Kliegl Performer for the environmental lighting and a manual board for all the bump and flash routines. I used a Celco Series 2 Sixty for the first time a while ago in Paris when Allen and I did a video for the Pointer Sisters and really liked it. One of the great things about them, particularly when doing a video, is the ability to 'dial out' a channel if things go wrong. Here on the Glass Spider Tour I'm able to 'dial out' a Showchanger, should it go down, then get the crew to reset it and then dial it back in again. With the exception of the two Celco boards, and a few lights that are universal, the equipment mentioned should be multiplied by two as there are two completely separate systems.

When did the tour start?

I flew to Holland on May 4th to get things set up and Allen arrived on the 10th. Then we seriously went into the programming mode on the 16th at the Ahoy Stadium and we were there until the 23rd when we moved into Rotterdam's main Stadium for the first show on the 31st May. After

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Europe we open in Philadelphia, USA on July 28th and we tour there until mid September. Then we hope to do South America, Russia, Japan and Australia, but I don't know if it's all possible yet.

The Wembley shows received a lot of bad press. Why was this?

As this show is so eclectic and theatrical you really need video and lighting because they help the audience focus and know where to look. I feel - and this is my own personal opinion - that having to play at 7.30pm in the evening is no good because the show is confusing in daylight - the audience's heads are going back and forth so that by the third or fourth song they are exhausted.

David tends to do shows that need to be seen five times or you miss so much. I've seen the show 35 times and I'm still seeing new stuff. I still find it fascinating and I'm still enjoying it. Most of the time after 4-5 weeks on the road you start to do stuff as routine - a sort of lighting masturbation.

Are there any lighting designers you admire?

I saw Billy Joel with Steve Cohen and I loved it. He was running a manual board and he's right on top of it and the pulse is right there.

I'd love to do Elton John because stylistically I think that he'd be a lot of fun to work with but lan Peacock does a great job. I would also like to work with Tears for Fears as I think that they are an interesting band.

What are your plans for the future?

At the moment I'm having to turn down a lot of work for the next five months. I don't think too far into the future because I believe that if you do your best job today, it seems to get you work tomorrow!

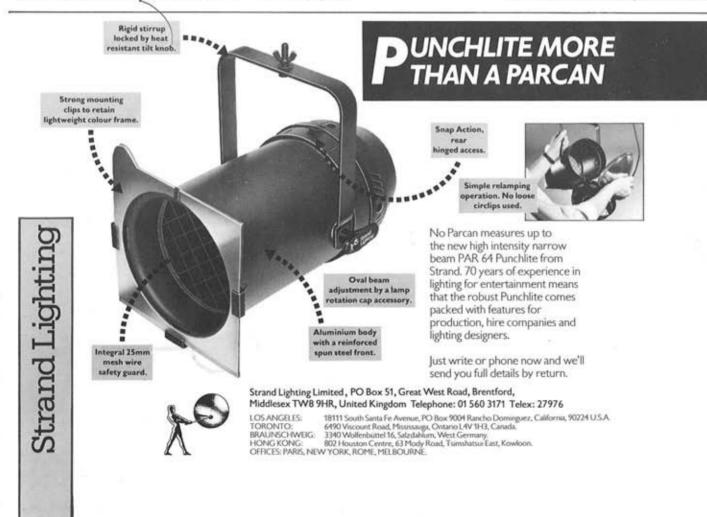


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TurboConcentric Goes Into Production

After completing extensive pre-production trials, the new Turbosound TFM-2 High-projection floor monitor went on sale from the end of July.

The new monitor has been in use with a number of leading sound reinforcement rental companies, including Samuelsons Concert Productions, who are using the unit at the Glastonbury Festival, and with Prince for his world tour.

Principle patent applications have been undertaken to protect the design concepts embodied in the TFM-2's TurboConcentric loading device. The unit is considered to be the most powerful compact floor monitor ever produced, yet the sound quality is a match for other full-range enclosures produced by Turbosound.

The combination of the new loading technique and the specially-designed bass section give the TFM-2 the ability to reproduce vocal frequencies clearly at the high power levels required by today's performers.

For full details contact Turbosound Limited, 202-208 New North Road, London N1 7BL telephone 01-226 0099.

Economist from Jivelight

The new Jivelight Economist is ideal for small club or mobile use. It is portable, using a foot or hand pumping system, has a fast heat up (approximately 8 minutes), L.E.D. warning lights, and a 1100 watt heater with service replacement facility. Manufactured in the UK, smoke fluid can be supplied in various flavours. Retail price is under E200.



For full details contact Jivelight Limited, Greyhound House, 16/18 Greyhound Road, London W6 8NX telephone 01-381 0868.

James from Soundtech

Soundtech Ltd - the Birmingham-based sound and light manufacturers have several new products on the market under the 'James' trade name. The James 500 Stereo amp now comes complete with 2 L.E.D's per side to indicate 10% and peak power, thermostatic fan cooling, and 250 watts per channel - with each side having its own independent power supply.

A new 12 volt mini spot fitting is now available to take the 20, 35 and 50 watt halogen lamps and, it can be supplied in virtually any colour. A 21-lamp Twister is also available in any colour and, as with all Soundtech products comes with industrial bearings and motors for longer life and greater reliability. Finally, there are new 24 volt, 4 Channel 'Twinkly' ceiling panels to fit standard 600mm x 600mm grids which give 'Stars In The Night Sky' effect.

For further information contact Kevin Hill at Soundtech Ltd., 137 Western Road, Hockley, Birmingham B18 7QD telephone 021-523 6344.

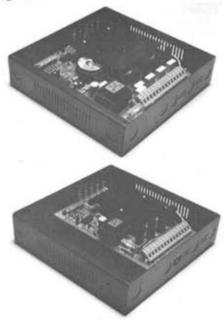
New Multiform Slaves

Multiform Lighting have announced full availability of their new slave packs designed for hard-wired installations. These new units replace earlier models with the same name, and incorporate numerous new features that make them compatible with most manufacturer's control systems.



Multiform's Multipac 4x1 Mkll and Switchpac 4x1 Mkll.

The new packs offer several significant advantages over more conventional black box slaves. Most important, the fuses can be replaced without the need to remove the lid of the box, a difficult task when standing on a ladder or in a dark corner. The Channel mimic indicators are also visible from the front allowing quick visual confirmation that the pack is receiving control signals.



Of particular interest to installers, the fixing holes are so positioned to allow direct fixing on to Trilite and Astralite trussing. Both slave packs are fitted with very high quality terminal blocks for hard-wiring of inputs and outputs, but provision is made for the fitting of a DIN socket to the control input if required. Both units are rated at 4 x 1kw per channel and are suitable for tungsten and inductive lighting loads. They are designed for 0-10V or 0-6V low voltage control and have high impedance inputs allowing several slaves to be driven in parallel.

In addition to the 4 channel inputs there is an Enable/Disable input and a Full On override input for use in matrix-wired displays. A D.C. output of 12V or 18V is also available to power external control systems. All I.C.s and opto-couplers are socketed and the triacs are fitted in screw terminals for ease of servicing.

minals for ease of servicing.

For full details contact Multiform Lighting, Bell Lane, Uckfield, East Sussex TN22 1QL telephone (0825) 3348.

TSE Series Expands

Following the successful introduction of the TSE Installation Series of separated mid/high and bass enclosures, Turbosound has introduced four new cabinets to further expand the system's flexibility.

They are the TSE-260 high frequency, TSE-211 mid/high frequency and the TSE-115 and TSE-215 bass enclosures. With the TSE Installation System, Turbosound introduced a range of easy-to-use, load-tested, flying hardware. Separate flying frames, designed to remove any stress from the enclosure itself, are available as part of this system and the range will be extended to include fittings for the new enclosures.

Specifications for the new additions to the TSE Installation Series are as follows:

TSE-260 - High-frequency enclosure, 100 Watts RMS, Frequency response 2kHz-20kHz +/-4dB, 267mm H x 451mm W x 480mm D.

TSE-111 - Mid-high enclosure, passive 2-way, 150 Watts RMS, Frequency response 250Hz-18kHz +/-3dB, 503mm H x 453mm W x 487mm D.

TSE-211 - Mid-high enclosure, switchable biamped/passive 2-way, 300 Watts RMS, Frequency response 250Hz-20kHz +/-4dB, 842mm H x 450mm W x 481mm D. TSE-115 - Bass enclosure, 250 Watts RMS, Fre-

TSE-115 - Bass enclosure, 250 Watts RMS, Frequency response 65Hz - 500Hz +/-3dB, 578mm H x 430mm W x 578mm D.

TSE-215 - Bass enclosure, 500 Watts RMS, Frequency response 60Hz - 500Hz +/-3dB, 575mm H x 844mm W x 578mm D.

For full details contact Turbosound Limited, 202-208 New North Road, London N1 7BL telephone 01-226 0099.

Laserbete Launched

Laserbete is a small console approximately the size of a portable television set, which projects a laser beam from its screen on to a facing wall or ceiling. By simply connecting a lead from a tape recorder amplifier or any source of music to the Laserbete console, the projected beam will then produce an exciting red laser display which moves in harmony with the music. A specially patented electro-optical transducer permits a brilliant laser display without fade or distortion of the moving pattern.

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Part of a consignment of 100 Laserbete units ready for shipment to Japan in July.

Both electrically and optically, Laserbete complies to UK and international safety standards, and is appropriately labelled to conform to British Standard BS 4803, and the manufacturers are seeking agents and distributers.

For full details contact Scientifica-Cook Ltd., 78 Bollo Bridge Road, Acton, London W3 8AU telephone 01-992 0268/01-992 0684.

New from Philips

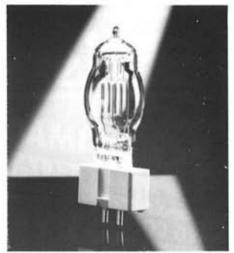
Philips Lighting displayed some interesting new and improved products on their stand at the B.K.S.T.S. Exhibition at Brighton last month. New products included an improved Bi-Plane studio lamp, a P2/27 (FEX) linear lamp and a redesigned CP73, G38 base lamp.

Bi-Plane studio and theatre lamps give up to 40% improvement in light output over mono-plane lamps in some luminaires, but their smaller filament size can sometimes increase the risk of contact between the filament coils. The new Philips Bi-Plane lamps have wider space coils and are as strong as mono-plane filaments in fact being more resistant to shock in the transverse plane. This slightly larger Bi-Plane filament-grid is more efficient in long throw lanterns than mono-plane grids and therefore offers optimum lamp efficiency. Initially the lamps will be available in 1kW types including CP71(40), CP70(24) and T19(11).

The new Philips P2/27 (FEX) lamps for 'blonde'



The new Philips CP73, G8 base lamp.



Philips' wider space Bi-Plane lamp.

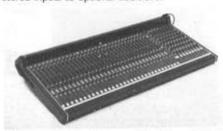
2kW lanterns on show at the stand are robust enough to take all the vigorous demands made by news reportage film crews. In normal FEX lamps, if the filament becomes dislodged from a support when hot, it will sag and touch the quartz envelope resulting in lamp failure. In the new Philips FEX lamp there are two supporting coils which are secured by dimples in the quartz. This means the filament cannot be dislodged from the centreline of the lamp giving it maximum usable

The construction of the Philips 5kW CP85 and 2kW CP73, G38 base lamps have been strengthened to help combat the problems of damage which occur when lanterns are moved from one location to another. Experience has shown that lamps can fracture across the 'pinch' where the filament supports pass from the bulb into the lamp base. The CP85 5kW has been reinforced with shoulders extending up from the ceramic base around the lamp neck. The new CP73 2kW has a redesigned 'pinch'. By changing from a straight to a curved

'pinch', this weak point has been eliminated in the 2kW lamp since a curved surface is much stiffer than a flat surface. Both lamps are available from

MX Sound Reinforcement Console

A radical new mixer both mechanically and electronically has been introduced by Soundtracs, with major design consideration being for touring rental companies. Available in three mainframe sizes of 40, 32 or 24 inputs, the MX Series is available with individual input metering and stereo inputs as optional additions.



The extruded aluminium and steel chassis is light and yet extremely rugged, and a totally new grounding system enables the console to be interfaced to any system with a minimum of problems. Four band equalisation (with two sweepable mids) and six dedicated auxiliary sends are incorporated on the inputs modules without the use of concentric potentiometers, along with an 8 x 4 matrix and eight dedicated effects returns on the groups. Four pin XLR sockets are provided in the left and right end cheeks for high intensity 'Littlites'.

A number of MX consoles have been pre-sold to rental companies who assisted in the product development and full production was established in July, said Soundtracs.

Further details can be obtained from Soundtracs plc, 91 Ewell Road, Surbiton, Surrey KT6 6AH telephone 01-399 3392.

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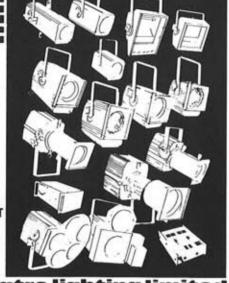
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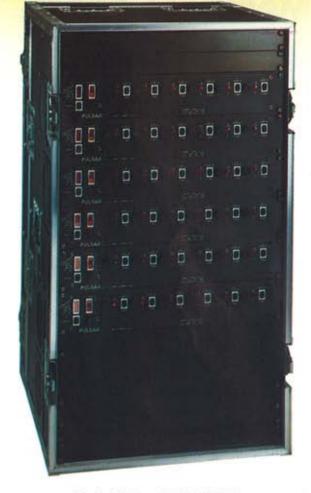
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