

LIGHTING+*Sound* International



published in association with the Professional Lighting and Sound Association



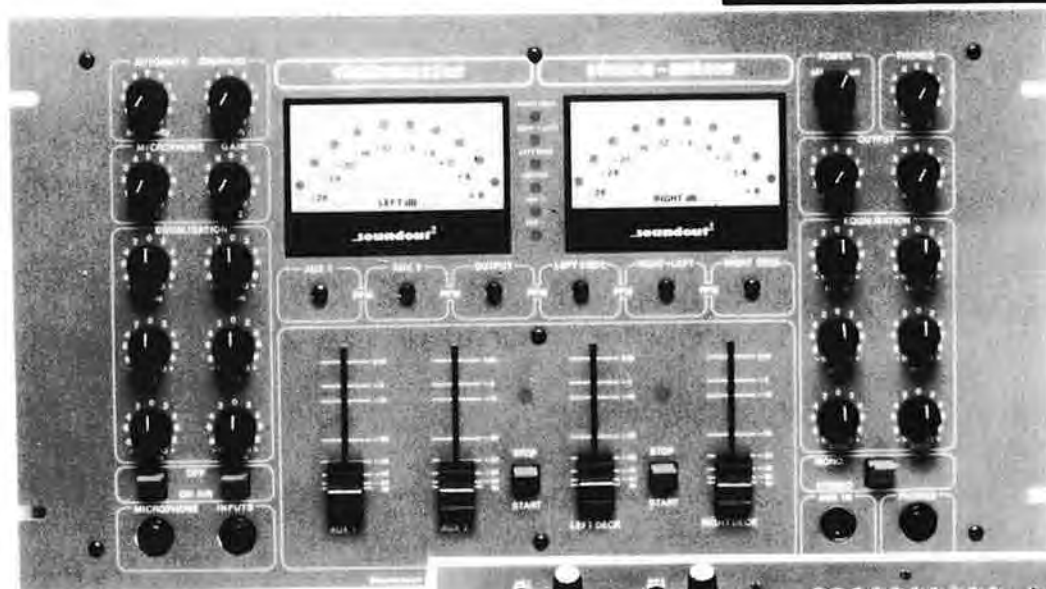
The Max Bell Theatre, Calgary Centre for the Performing Arts.

November 1985
Volume 1 No.1

£1.50

Clubmixing?

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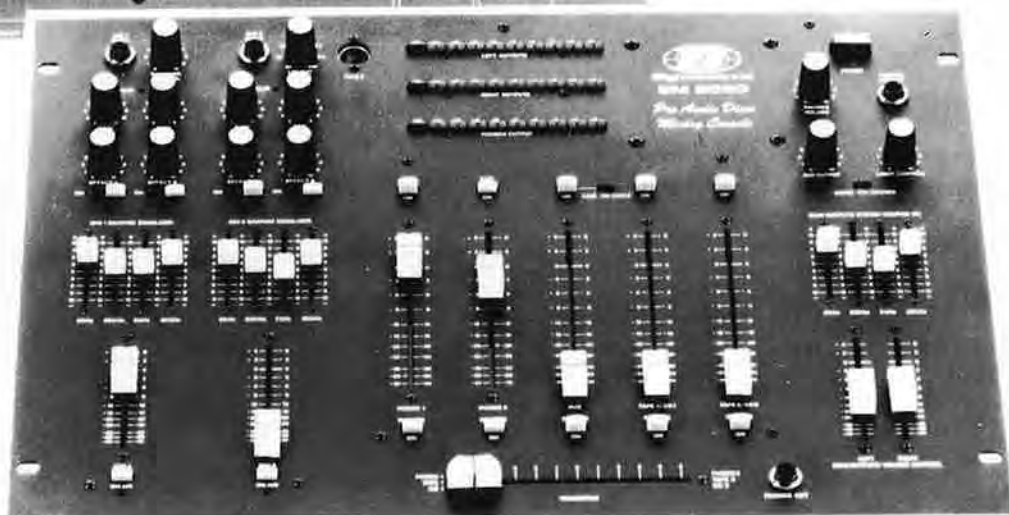


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Both mixers are distributed exclusively in the UK by Avitec and form part of their comprehensive sound equipment "menu". Avitec's menu of sound equipment is already first class with each unit selected for its particular forte in a given application. This combines with the knowledge and expertise of Avitec's sales and technical team, to make a powerfully sound reason to look closely at the Avitec sound menu before purchasing a system. **Catalogue available on request or visit our brand new showroom facility opening early November (Mon-Fri) – by appointment if possible please.**

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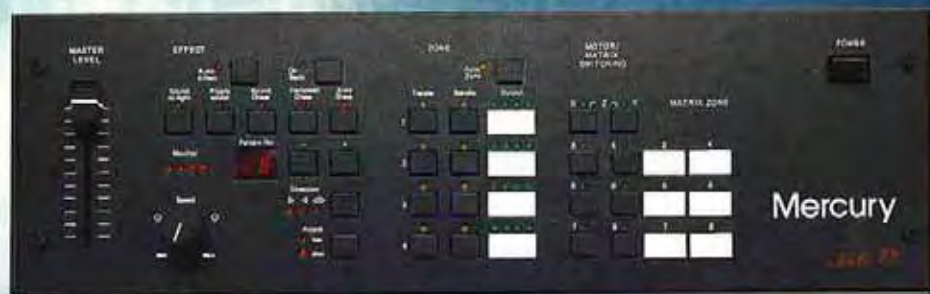
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LIGHTING+*Sound* International

NOVEMBER 1985

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First Night at the Dome

Relaxed smiles from Andy Pound, Martin Tasker, Colin Whittaker of Cerebrum Lighting and Keith Dale of Celco after the first lighting and sound "event" at Birmingham's new Dome complex on October 16. For full story see special colour feature pages 37-45.

LIGHTING+*Sound* International

Editor and Publisher: John Offord.
Advertising Manager: Ann Holland.

Published monthly by John Offord (Publications) Ltd.,
12 The Avenue, Eastbourne, East Sussex BN21 3YA.
Telephone: Eastbourne (0323) 645871.



published in association with the
Professional Lighting and Sound Association

ISSN 0268-7429
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Annual Subscriptions: UK £20.00; Europe £25.00; airmail £40.00; US \$70.00.

The First Edition

As a sound engineer will balance microphones, with this first edition of **Lighting + Sound International** we've endeavoured to present a balance of lighting and sound talk across the widest possible spectrum of activity. And we hope the different voices speaking in the magazine will provide a bright introductory mix of interesting and thought-provoking reading.

Our area of interest ranges over the complete band of theatrical activity, across the field of cabaret and clubs, and into disco and other forms of "presentation". As Tony Gottelier states in his article 'All the World's a Stage' there are sufficient parallels to be drawn between theatre and discotheque to suggest that they are of the same genus.

And it is interesting to see how the former Birmingham Night Out has slipped so speedily from being a cabaret-style venue to a discotheque complex within the space of a few months. But 'The Dome' has at the same time retained and enhanced technical standards of both staff and equipment to the highest concert level, and in the process has gone forward rather than backwards in the pursuit of change.

The use of scenery in disco-style venues is another subject of mutual interest and it comes up in Joanna Turner's conversation with the men at BBC TV's 'Top of the Pops' and in Tony Gottelier's comments on the world's most successful discotheque, Studio 54 in New York City.

Lighting + Sound International is published in association with PLASA (Professional Lighting and Sound Association) and it is interesting to observe that it was only two years ago that the body changed its title in an attempt to reflect a broader image than the purely disco equipment manufacturing area it had originally emerged from.

Vice-chairman of the Association John Lethbridge, writing in the official guide to the recent PLASA Light and Sound Show, made comment on the continuing major advances in both electronics and mechanics, new concepts in design, and more important, the higher degree of professional approach to manufacturing and marketing that was now evident.

These factors, coupled with the fact that the use of creative lighting and sound reinforcement now crosses into many market areas, not only in the entertainment industry, but into the communications, information technology, leisure, advertising and PR industries, are reflected in the new title, and **Lighting + Sound International** will set out to encourage the growing inter-relationship of many of these areas, and the professionalism that the Association stands for.

To do that we need a response from our readers, from people in the industry. We will be more than happy to receive ideas for articles, surveys, regular features and so on that can be added to our own plans already in the pipeline to make **L+SI** the brightest voice in the field. And we'll take comment and criticism, of course, and look forward to your letters, for publication or otherwise.

I would like to thank the chairman, vice-chairman and officers and committee members of PLASA who have taken the time to aid our efforts in getting this magazine into print and out into circulation worldwide.

John Offord,
Editor and Publisher.

From PETER BROOKS Chairman of the Professional Lighting and Sound Association

Welcome to the new PLASA magazine, **Lighting + Sound International**. Our aim will be to cover professional lighting and sound installations ranging from clubs and discotheques through to theatres, and provide a regular forum for discussion throughout the industry.

The aim of the Association is to promote a more professional approach to the lighting and sound business. We are aiming to stimulate this professionalism through the pages of this magazine by providing a different approach to the industry's problems. We will be publishing technical articles in an attempt to promote a common approach to the problems of equipment standards, be they those of communication, operation, use, or safety. We will also be undertaking some of the fundamental background research into the ways in which each of the many markets in which we all operate actually work, and hope this will provide a service to both users and suppliers within the industry.

As chairman I extend a general invitation to interested parties to join PLASA. If you are manufacturing or supplying reliable, value for money products, on time, and with back up, then we are the Association for you. If you are a designer or an installer who has successfully completed several installations and are providing a good customer service with post-completion back up, apply now for associate membership. It's not expensive, and could usefully serve to further your business.

Full details of categories of PLASA membership will be given in the December issue of **L+SI**, together with details on how to join. (You will find a full list of members on page 60 of this issue.)

To existing PLASA members I urge you to support our new magazine by keeping in touch with the editor with your news and comment.

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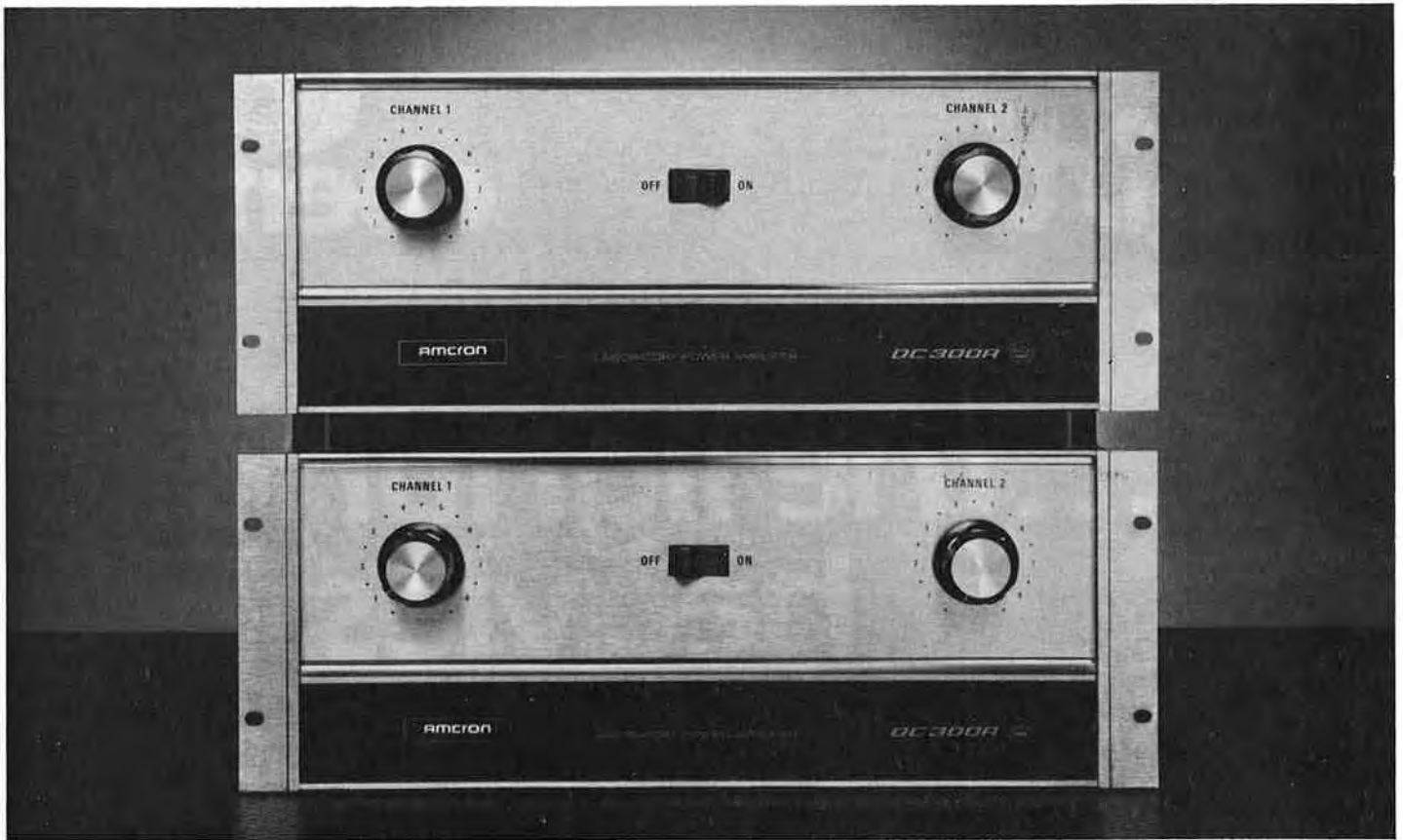
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New P.A. System for Bournemouth International Centre

Following a BIC management decision to install a more powerful and flexible P.A. system, PAK Audio recently refitted the main 4000-seat Windsor Hall in the Centre with a "hybrid" that was described to **L+SI** as "an excellent full-range system, with fine music handling" by the venue's technical manager Peter Knight.

The new system in the year-old complex comprises of a rack of 10 PPX amplifiers manufactured by Citronic connected to 8 Sherman Audio "Commando" full-range 2-way cabinets loaded with Sonaudax drive units, with a Soundcraft 500 24:8:2 audio mixer via an Ashley SC88 4-way crossover.

"We designed the system ourselves in conjunction with Ken Hughes of PAK Audio," Knight explained to **L+SI**. Other equipment such as cabling and boxes were purchased direct by the Centre, and further equipment includes a Court G60 graphic equaliser and a Roland SDE 1000 digital delay unit. Microphones are AKG C45 1EB's.

Since its commissioning on July 3rd the new system has had to cater for events as diverse as the Russ Abbot Show which ran through the summer to September 3rd, and the recent Labour Party Conference. According to reports, technical staff at the BIC are now happy that they can comfortably cope with any event promoted within the multi-purpose main auditorium.

A further improvement is that the mixing desk can be placed in any of three different positions in the auditorium in addition to its base home in the control room at the back of the hall.

Technical Helpline

Announced at the PLASA show in September, THL (Technical Helpline Ltd.) has been set up as an



Bournemouth International Centre—better sound all round.

associated company to Squire Light and Sound to look after the back-up servicing needs of Squire's ever growing list of contract customers.

THL opened its telephone lines on October 1st and is managed by Chris Simpson from the London offices of the Squire organisation at 180 Junction Road N19. Simpson told **L+SI** that they have a dozen regular engineers on call, and back-up contacts with about 25 more so that a call for help could be linked to an engineer anywhere in the country. This central register of engineers has been computerised, and provides the basis for the expansion expected as the THL operation begins to grow.

"Primarily we hope to solve a lot of problems over the telephone, as it is often quicker and cheaper for the client this way," said Simpson.

Although the service is for Squire's customers only at this stage if a call for help is received, Chris Simpson will endeavor to find an engineer on his list, and as he said "link A with B".

Full details on 01-281 3222.

Huddersfield Princess Videotheque to open February

The century-old former Princess Cinema in Northumberland Street Huddersfield will reopen in early February 1986 as the Princess Videotheque. Partners in the £30,000 scheme are Simon Duckworth and Patrick Green of Associated Videotheque Ltd. of Leeds who have also taken a lease on the Tower Cinema in New Briggate, Leeds for a similar scheme that will see this venue reopening in mid-summer 1986.

"The basis of our idea is that the venues will combine cinema, theatre and disco," Duckworth told **L+SI**. The Princess will make use of a lighting boom that can be lowered from a very high ceiling, and it is planned to equip this with the latest in lighting technology. Tenders are currently being considered and ideas looked at to produce what Duckworth described as a "very sophisticated" atmosphere. A 20' x 16' video screen has already been agreed.

Front of house facilities are to be upgraded, the small cinema stage is being enlarged and dressing rooms built so that live performance can be presented. The venue has a capacity of 650.

New Club Pub & Catering Show for Scotland

Iain MacFarlane Exhibitions of Manchester have announced **The Scottish Club Pub & Catering Show**, a totally new event, to take place in Hall 5 the new Scottish Exhibition and Conference Centre in Glasgow from 3-5 June next year.

As with their UK show, there will be a separate "Sound and Light" display in the adjacent Hall 1. Dates have also been announced for next year's main UK event, and this will take place from October 7-9 1986 at the new G-Mex Centre in Manchester under the changed title of **National Club Pub Hotel & Catering Show**.

For full details contact Iain MacFarlane Exhibitions Limited, 15 Elm Grove, Didsbury, Manchester M20 0RL tel: 061-434 5300. (see also "Exhibition Diary" at the back of this magazine)



Chris Simpson on the Technical Helpline.



Charlie Day has been promoted to Sales and Marketing Manager for Soundcraft Electronics Ltd. He joined the company in 1984 as International Sales Manager, and was responsible for the development of the overseas dealer and distributor network. He will maintain his responsibilities for international sales.

The company recently announced the sale of one of their Series 1600 consoles to the Australian Broadcast Commission, which will be fitted with the latest stereo input option.

Light Up in Scotland

Trafalgar Lighting of London and Set Up Ltd. of Newburgh in Fife have announced the formation of a new company called **Light Up (in Scotland) Ltd.** to run in parallel with their existing businesses.

Based at the premises of Set Up on the Newburgh Industrial Estate in Scotland, Light Up is able to offer a complete hire, sales and service of stage lighting and effects throughout Scotland and the North of England. Situated near Perth, the new company will be particularly conveniently located for the Edinburgh Festival, as well as companies resident in Scotland, and it will carry a comprehensive range of equipment at competitive prices.

For further information contact either Alan Paulus at Trafalgar Lighting tel: 01-360 0936 or Tony Gee at Set Up on (0337) 40831.

Advance Notice

Plans to enlarge the Cliffs Pavilion at Southend-on-Sea have got through the first committee stage, and if all goes smoothly the venue will have a circle in two years time, adding around 600 seats to its present 1,100 total. Cost of the project, which will provide other new facilities, is expected to be about £1.5m.

New Sound at the Torch

Torch Theatre Milford Haven have just installed a new Hill Audio "B Series 3" 12 into 4 into 2 mixer. It has been integrated into the existing system of HH amps and patch field by theatre technicians



Paul Rowland and Geoffrey Spain inspect the Torch Theatre's new Hill Audio mixer.

Paul Rowland and Geoffrey Spain, and a multicore has been fitted, enabling the mixer to be set up in the auditorium in just 15 minutes with full facilities available. An appeal to pay for the equipment was launched by the theatre in the summer and over £400 has already been raised towards the £1850 total cost, which included 10 multicore and connections and "Alps" faders.



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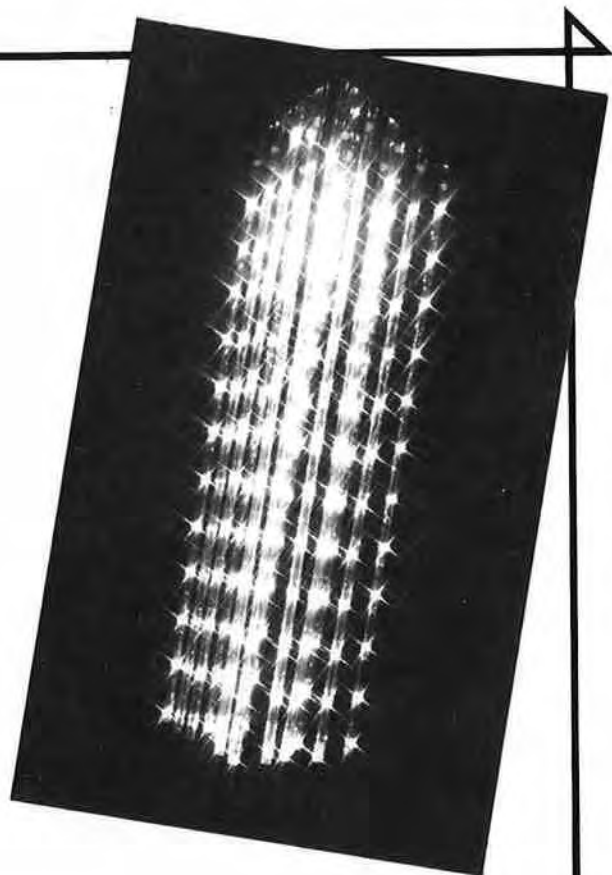
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Citronic hit the half million

Citronic Limited of Melksham in Wiltshire have announced that during the first full year of production, over £500,000 worth of their PPX amplifiers have been sold by their dealers around the country. The PPX is considered to be a "thoroughbred workhorse" by the Citronic sales team, but they reckon their view is backed up by the ever increasing sales in the "professional" audio market.

On the turntable side, sales of the company's new CS300D have exceeded all expectations with even larger repeat orders following up the huge initial demand. They are expecting the same response to the CL300D (the chassis version of the CS300D) which is now being fitted to most of the consoles in Citronic's range.

Extensive Refurbishment for Hull New Theatre

The recently re-opened new Theatre at Hull has had considerable refurbishment, and the technical side has by no means been forgotten. Chief electrician Alan Edwards told *L+S* that the limes box has been extended to provide accommodation for the theatre's new lighting board and two new CSI follow spots.

The Q-Master 2000 lighting board has been extended from 80 to 120 ways by the addition of 24 2.5k and 16 5k Green Ginger dimmers. The existing front of house lighting bridge has been extended to allow 8 2k Silhouette 30's to be added to the existing Patt. 264s. In addition, the existing F.O.H. vertical booms have been re-positioned and equipped with 1k Sil. 30's.

A complete new sound system has been installed based on Bose speakers and a 16 channel Studio Master mixing desk. Also included are graphic equalisers, a digital reverb unit, 2 Revox B77 tape decks, a Technics cassette deck, 6 Sennheiser rifle mics, and 6 Shure SM58 vocal mics.

The general lantern stock has also been increased by adding 20 1k and 6 2k Starlettes, and a new flood bar has been purchased.

The Hull New Theatre has been featured in the October issue of 'Entertainment & Arts Management', also published by John Offord Publications.

October 1985 £1.50
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HULL NEW THEATRE
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 See Feature on Pages 9-12

Hull New Theatre
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 176 Junction Road, London, N19 5QQ.



Staying with TABS

After 16 years with the Rank Organisation, and five of those as editor of the influential 'TABS' magazine issued by the company, Richard Harris has taken early retirement, and leaves at the end of October. He will retain his connections with the magazine for the immediate future, he told L+SI.

Success Abroad for CCT

CCT Theatre Lighting have announced that well over half their production is now going overseas, with ever increasing shipments to North America. Computer controlled colour change systems have been installed in the newly-opened Calgary Arts Centre which is featured in detail in this issue of L+SI.

Similarly, much of CCT's product has gone to Australia in the last year, where a joint venture company, Jands CCT, has already completed many installation projects. In Hong Kong the UK company recently shipped out a mixture of over 700 spotlights, mostly Silhouettes and Starlettes together with auto colour change systems and an extensive range of accessories for the several theatres and performing spaces in the new Academy for Performing Arts.

A major job in progress is for Jupiters Casino on the Gold Coast which promises to rival the finest Las Vegas can offer. Again, several hundred lanterns are being installed along with a 256 channel memory lighting control and dimming system.

... and on the Home Front

During the last year CCT's factory in Mitcham has been considerably reorganised along with several improvements including a completely new paint system. This has twin conveyor line, electrostatic spray booths and radiant oven. This streamlining of the system has enabled CCT to hold their prices and also to have products available to suit the most demanding of circumstances.

The company's Bristol operations were recently re-located in new premises in the St. Phillips area on a brand new industrial estate with good access and parking. A full range of equipment and accessories is for sale and hire at Unit 9, Ferry Steps Industrial Estate, St. Phillips, Bristol telephone (0272) 774074.

From October AJS was appointed exclusive stockists for CCT products in Kent, East and West Sussex, Hampshire, Dorset and the Isle of Wight. They will only be stocking CCT luminaires and accessories. AJS are based in Bournemouth and East London.

Everyman Theatre, Cheltenham to re-open in March



The Everyman Theatre, originally named the Opera House, opened on the 1st October 1891. The theatre was designed by the distinguished theatre architect Frank Matcham, and the opening production of Lady Clancarty was led by Mrs Lillie Langtry.

The next seventy years saw the Opera House reflecting the British theatrical scene generally, with its changing tastes and fortunes. The theatre was renamed the The Everyman in 1960, with the formation of a resident repertory company.

The construction of a shopping arcade on vacant land at the rear of the Everyman gave the opportunity to upgrade the theatre. The decision was made to retain and refurbish the splendid auditorium, and construct a new fly tower, dressing rooms, rehearsal room, offices etc. The front of house areas would be considerably extended by the inclusion of a house next door to the theatre, and this would also allow the bar and catering facilities to be expanded.

Work on the site commenced in January 1983, and it has just been announced that the 670-seat

theatre will reopen on the 20th March 1986, with the Gloucestershire Everyman Theatre Company once more in residence. A new 85-seat Studio Theatre has been built within the new complex, and this will open on the 20th February.

Artistic Director of the Everyman Theatre Company is John Doyle and Technical Manager Roger Hendry.

Technical Details:

STAGE

Proscenium Width: 7.4 m.
Proscenium Height: 9.0 m.
Stage Depth: 10.6 m. (Proscenium wall to back wall)
Grid Height: 18.48 m.
Between Fly Galleries: 15.9 m.
Flat stage, with a trapped area immediately upstage of the orchestra pit area, 7.2 m. wide by 4.8 m. deep.

STAGE LIGHTING

Front of House lighting positions include a bar at the rear of the main ceiling, above the gallery, and bars either side of the upper circle sides. Circuits are also available in the boxes, and the front of the dress circle. The previous positions on the upper circle front have been removed.

Stage Lighting Control and Dimmers:

Stage lighting control normally located in the control room at the rear of the dress circle, but may alternatively be positioned in the stage right auditorium box.

Rank Strand Gemini 120 channels, with Rigger's Control. The dimmers are Rank Strand Permuss, 100 2.5kW and 20 5.0kW. There are thirteen Riggers Control Socket Outlets, located around the fly tower and in the auditorium.

SOUND AND COMMUNICATIONS

Sound control normally located in the control room at the rear of the dress circle, but the mixer can be plugged into an outlet in the stage left auditorium box.

12 channel into 4 group mixer: 600 ohm Line level distribution to loudspeakers outlets. Loudspeakers have integral power amplifiers. Any loudspeaker circuit may be selected to any output group.

Auditorium Loudspeakers - 3 pairs of Tannoy Pumas.

18 Microphone Lines.

78 Tie Lines to various stage and front of house areas.

21 Loudspeaker Lines.

Stage Manager's desk may be plugged into sockets located downstage left, downstage right or centre stalls. Communications facilities include twin ring intercom, talkback to eight outstations, and cue lights to nineteen locations. There are calls and show relay to dressing rooms and other backstage areas, and calls to public areas. Wiring has been provided for CCTV, although no equipment will be provided initially. An inductive loop aerial has been provided for the hard of hearing.

Sound and Communications by CTL (Control Technology) Ltd.

DESIGN TEAM

Architect: D. Ross - Borough Architect and Planning Office,

Cheltenham Borough Council.

Quantity Surveyor: I. Wallace - Chief Quantity Surveyor,

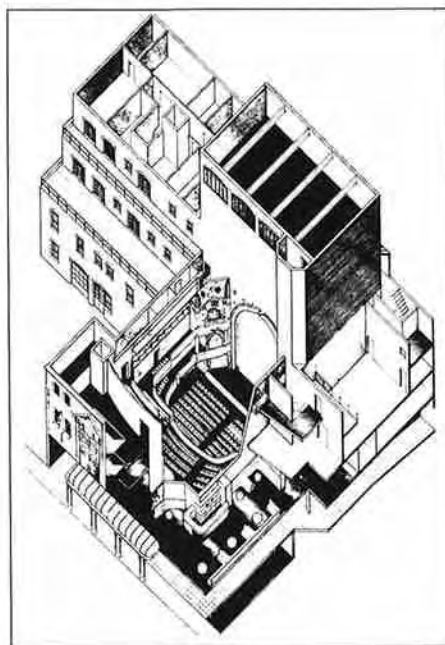
Cheltenham Borough Council.

Theatre Consultant: Carr and Angier.

Structural Engineer: Anthony Hunt Associates.

Services Consultant: Dale and Goldfinger.

Acoustic Consultant: Arup Acoustics.





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The Intelligent Interface, which is fast becoming the first choice amongst schools and colleges, can handle up to 36 channels of dimmers at once.

Better still, it comes complete with a cue controller and essential software for the BBC Micro, to provide you with a lighting board that has the performance of a memory system many times its price.

Even Scrooge wouldn't argue with that.



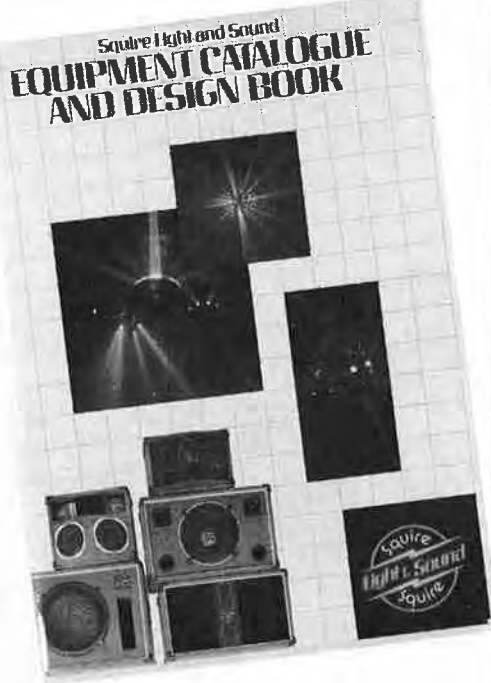
PULSAR
Lighting for Effect.

Squire's 64 Page Colour Catalogue

Squire Light and Sound have produced a "better than ever" 64 page colour catalogue this year, and it features many new products.

The company has recently negotiated sole distributing rights on LAMPO Lighting effects together with their ongoing agencies with Prograsistem of Italy and Sapro of France. Other exclusive ranges described include Squire Speakers.

The new Catalogue includes over 200 illustrations and also incorporates sections on interior design, lasers, bigscreen video, and interior landscaping. It is aimed primarily at the Club and Venue Market.



An enthusiastic Squires told **L+SI** "A lot of sweat and toil have gone into this year's Catalogue. We have tried our best to make this book essential reading for every club and venue owner in the country".

The catalogue is available free of charge on request by writing to Squire Light and Sound Ltd (Catalogues), 176 Junction Road, London N19 5QQ.

Strand Lighting Worldwide

Rank Strand Limited and Strand Century Inc., already managed as a worldwide business, have announced a further step towards complete integration by operating as one company trading as **Strand Lighting**.

This rationalisation of Rank's lighting activities extends to Rank Electronics Asia Limited, operating in Hong Kong, Singapore and Malaysia whose lighting operations now come under the direct control of Strand Lighting.

Specialising in the manufacture and supply of luminaires and controls for stage, studio and location lighting as well as architectural lighting controls, the combined sales, marketing and development activities of Strand Lighting presents a broader base of product selection which it is claimed will lead to wider distribution and expanded sales and technical services.

Strand Lighting in the U.K. will continue to be based at Brentford, West London with its manufacturing plant in Kirkcaldy, Scotland. Strand Lighting in the U.S.A. is based in Los Angeles, with additional sales offices in New Jersey and Toronto, Canada.

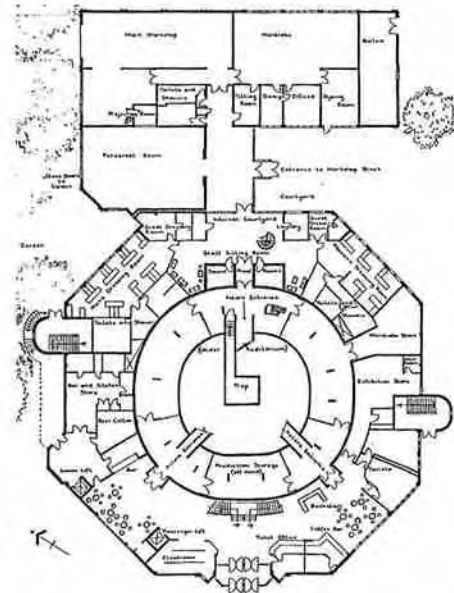
New Victoria Theatre

Due for a spring opening, the New Victoria Theatre at Stoke-on-Trent was topped out in early October.



On target for spring opening: the New Victoria Theatre at Stoke-on-Trent.

Lighting and Sound Consultant for the project is Manchester Palace Theatre's Geoffrey Joyce, and he told **L+SI** that the control will be a Rank Strand



Gemini board. Most of the lanterns will consist of refurbished Rank Strand lanterns from the old theatre, some of which have been in use since the Theatre first opened 23 years ago. Additional lanterns will also be Rank Strand.

The AMC lighting board presently used at the Old Vic will be installed in the rehearsal room at the new theatre. The sound equipment for the new venue has still to be decided upon.

Eurolight MSL take over Lighting Sales Division from Theatre Projects

Mike Sweetland, managing director of Mike Sweetland Lighting Limited and Nick Mobsby, managing director of Eurolight Limited have taken over the Theatre Projects Lighting Sales Division in Mercer Street, Covent Garden under the banner of Eurolight MSL. The new combination has also taken over Theatre Projects B.V. at Koudenhorn near Haarlem in the Netherlands.

Eurolight MSL is a subsidiary of holding company Mike Sweetland Lighting, and it leaves the new combine with bases in the UK at Manchester, Birmingham and London. The original Eurolight base at New Malden in Surrey will be phased out as operations are moved to Covent Garden.

Graham Bowen has been appointed managing director of the new company which will now have a wide range of services to offer the entertainment industry. "It's a natural progression for the two companies to come together," said Mike Sweetland. "It will give us a much broader-based operation covering consumer products, equip-

ment, installation services, etc. that can all be covered from one organisation.

Conversion Kit for the Patt. 45

Phillip L. Edwards Theatre Lighting of Glossop, Derbyshire have announced the production of a conversion kit to enable the ever-popular Patt.45 "optical biscuit tin"—the mainstay of many school and small theatre stages—to be brought up to date and allow it to compete with modern lanterns "on equal terms".

At the other end of the scale the company, a family run concern, has added a Rank Strand M24 control system to its hire stocks, and is offering it with or without dimmers and mains distribution "at economical hire rates".

The company carries out a variety of commissions ranging from the supply of complete lighting installation for the Buxton Festival (annual) to providing the touring lighting system including control and lanterns with rigging for the Nottingham Playhouse Roundabout company.

Dealers Wanted

South West Lighting of Starcross, Exeter are looking for distributors (dealers or DJ's) for their range of lighting products. Sales director Paul Goody told **L+SI** that the company was formed in late 1984 with the intention "of producing British products at unbeatable prices and with a 'no quibble' guarantee".

All lighting products are finished in spun aluminium and are complete except for lamps. The range includes pinspots, helicopters, scanners, mirror balls and multibeams. For information contact Paul Goody at South West Lighting, 2 Staplake Road, Starcross, Exeter tel: (0626) 890806.



South West Lighting's 4-head Multibeam.



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TORONTO – 6490 Viscount Road, Mississauga, Ontario, Canada L4V 1H3. Tel: (416) 677-7130. Telex: 06968646

WEST GERMANY – 3340 Wolfenbüttel 16 – Salzdahlum. Tel: 0 53 31/79 51-53. Telex: 95641

HONG KONG – 802 Houston Centre, 63 Mody Road, Tsimshatsui East, Kowloon. Tel: 3-685161. Telex: 44953.

OFFICES IN PARIS AND NEW YORK.

Pavilion Theatre becomes Pier 39

Purchased by Mark Meyer during the summer, Cleethorpes derelict Pavilion Theatre was reopened just six weeks later, on 4th September, as "Pier 39". Named after the famous night club in New York, the building has been transformed into the area's premiere night spot.

A first class interior has been provided, and there are four bars, a cosy restaurant, and a fast food area. In the centre of the club is a raised dance floor and hanging above it 1½ tons of the latest in lighting and special effects.

According to Avitec, who supplied the lighting rig and equipment, Pier 39 has a "first to its credit in that it is the first venue in the country to have two Orions to give off a strobe effect". To add to the dramatic effect there are two Astrons attached to Lynx elevators that can be lowered by use of a joy stick to within six feet of the dance floor.

The lighting rig itself is made of aluminium and was assembled and rigged with lighting by Grimsby Road Runner Discotheques, the whole construction taking two full weeks to build on trestles and hoist to ceiling level. The cost of this rig alone (including equipment) was £40,000.

The sound system is at present undergoing modification at a cost of £5000 to bring the latest technology into play.

The go-ahead operation of Grimsby Road Runner also provides the DJs for Pier 39, and rather than being positioned adjacent to the dance floor they are perched on a terrace 15 feet high giving the venue an "American feeling".

The club is open seven nights a week and with doors open at 8.00 p.m. has been full by 8.45 p.m. every night. In fact, business has been so good owner Mark Meyer is already planning an extension to the premises.

Techplan Commences Operations

Technical Planning Limited, an independent consultancy company resulting from the restructuring of Theatre Projects, has commenced operations in



Pier 39—the raised dance floor with £40,000 worth of lighting and effects equipment above.

Epsom, Surrey, an area rapidly becoming a focus for theatre consultancy and equipment design.

The company will be known as 'Techplan' and it has announced that it will concentrate on "behind the scenes" consultancy and project management for owners, architects, engineers, equipment manufacturers, installation companies and, indeed, other consultants who need assistance with special facilities for building and construction projects world-wide. Its areas of work include places of public assembly such as multi-use auditoria, conference and concert halls, theatres, arenas, studios, theme parks and leisure projects.

Techplan aims to remain "behind the scenes" providing planning, design and contract supervision services on stage and studio machinery, rigging, lighting and projection, sound, communications, video and audio-visual installations. Its primary role will be that of designer and coordinator of technical installations to fulfil an ar-

chitect's, client's and user's needs for a given project: it is a collaborator bringing particular expertise to building design teams on special commissions.

Under the direction of Richard Brett, B.Sc.(Eng) who was for 17 years Managing Director of Theatre Projects Consultants, Techplan has a team of consultants, incorporating Ray Carter, John Whitaker and Charles Wass. Initial work includes an important UK regional theatre, a conference facility for one of the world's premier exhibition venues and the technical installations for a major project in the Middle East. Brett said: "I am very encouraged by the response to the collaborative service and support role which Techplan is providing and am looking forward to making a continuing contribution to the entertainment and leisure industries.

Techplan's office is at St. Andrews House, 22 High Street, Epsom, Surrey KT19 8AH.

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Calgary Centre for the Performing Arts

Kuala Lumpur Putra World Trade Centre

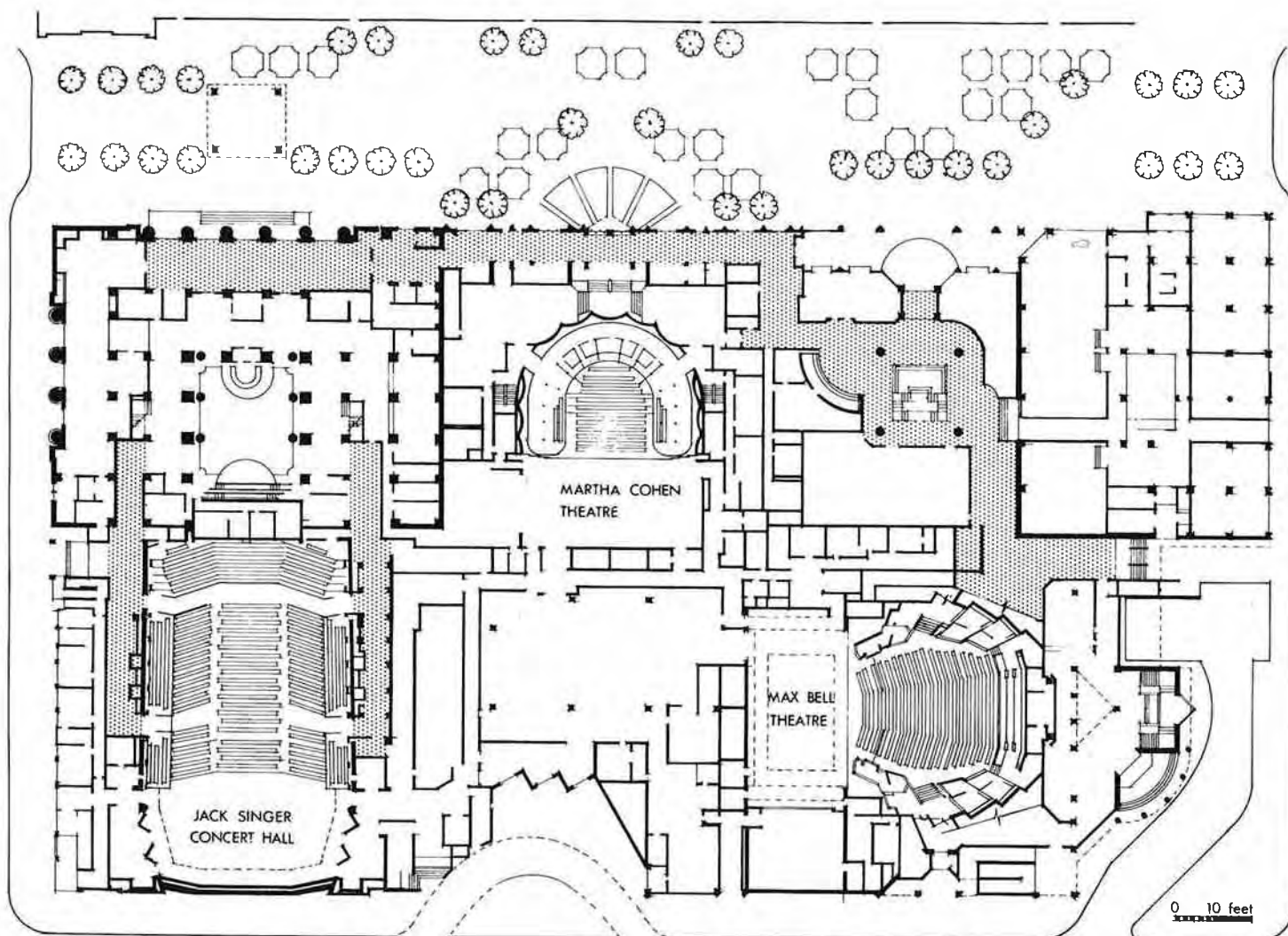
John Pick follows Theatre Projects worldwide

The most famous theatre consultant in the world can slip unnoticed into the auditoria of the National Theatre, into the great Arts Centres of Canada, Hong Kong and the United States, or into the West End or Broadway shows that bear his name. For although he heads the largest theatre consultancy organisation there is, and although his name is inextricably linked with Theatre Projects Group, of which he is Chairman and

founder, Richard Pilbrow's face is less familiar to the general public than the faces of many of your emptier theatrical vessels.

Yet this quiet and unobtrusive dynamo has done more to shape the nature of performance in our times—as lighting designer, consultant, author and as theatrical, film and television producer—than seems possible for one man. His conversation twinkles with anecdotes of triumphs and disasters around

the world, of political intrigues of mind-numbing complexity, and of the grandeurs and follies of a quarter of a century of working at the top. He tells of his earliest days as a lighting expert, his productions in London and New York, and of the way in which he and his colleagues at Theatre Projects have shaped the rules of international consultancy by their practice—so that now there are few major enterprises of any stature this side of



The Calgary Centre for the Performing Arts: "more of an arts 'district' than a centre".



Umno Conference Centre, Kuala Lumpur—built in the style of the Malaysian long house.



The Max Bell Theatre, Calgary Arts Centre—papering the walls with people.

the Iron Curtain that have not in some way been shaped, advised and kitted out by Pilbrow and his jet-setting team.

Twenty years ago theatre consultancy was primarily technical—often simply the design of lighting, on which Pilbrow is the standard authority. Now, it is a long and complicated assignment—political assessment, research, the presentation of feasibility studies preceding the intricate technical planning that comes when the architect gets down to detailed work with the design team. And it doesn't end with the building of a theatre or an arts centre. 'Increasingly,' says David

Staples, Head of Feasibility Studies in Pilbrow's team, 'We have to be involved in staffing, in the projection of running costs, in designing mock-ups of the kinds of programme that will run in our buildings.' The process of consultancy can begin years before a major complex opens and continue for years afterwards.

With the accumulated knowledge of more than a quarter of a century—Theatre Projects was formed in 1957—the consultants will sometimes find that they know rather better than the sponsors the kind of building that will achieve their ends. Most are glad to bow

to the expertise of Pilbrow and his colleagues, backed as it always is by extensive local research, but there are obstinate exceptions. Pilbrow chuckles to remember one township in the Yukon which had decided that its new civic theatre should have a thousand seats. Only when Pilbrow discovered that the biggest audience they had ever had in the area for anything had been 240 did the locals lower their sights. Another group out in the sticks were more mulish still. They refused to believe that their proposed theatre of 1400 would not attract Broadway shows; their leader growled to Pilbrow that



The Jack Singer Concert Hall on opening night (above) and (right) showing vertically moving acoustic canopy and acoustic banners.

they wanted the kind of theatre that Katie Hepburn would act in. Only when Miss Hepburn's personal manager had given a categorical assurance that his star wouldn't work for the kind of returns such a theatre gives did the Theatre Projects team win the day.

Governments are sometimes more willing to bow to experience than local pressure groups. Alan Russell is just back in the Theatre Projects offices from the successful opening of the vast new Umno Conference Centre in Kuala Lumpur, a central part of that city's new Putra World Trade Centre. The success shows something of the complexity of a Theatre Projects consultancy. They have worked on the design of the 3,500 seat hall, with its two adjacent 1,000 seat rooms—each of which divides in turn into two 500-seaters. They have supervised the technical installations in those areas and in the 13 'breakout' rooms (one for each state in Malasia); all have projection and T.V. facilities. But the real test was at the Centre's opening, when on 24th September the Governing Political Party, UMNO, held their Conference and staged a spectacular opening ceremony.

'I was terrified,' grins Russell. The proceedings began when two of the Party Chairman's young nephews descended from the roof on clouds, and led the Prime Minister stage left. From the floor rose a spotlit model of the Centre. A spotlight then played on portraits of previous PM's, and on the portrait of the present one, while an epic poem was relayed through the vast hall extolling their virtues. Around the building nearly 12,000 people were watching on T.V. monitors. It was also going out on national television, and being broadcast in five



languages, and filmed for posterity by a State Film Crew. 'And all that,' says Russell, recalling that the building had in the event come through with flying colours, 'with an absolutely untrained technical crew!'

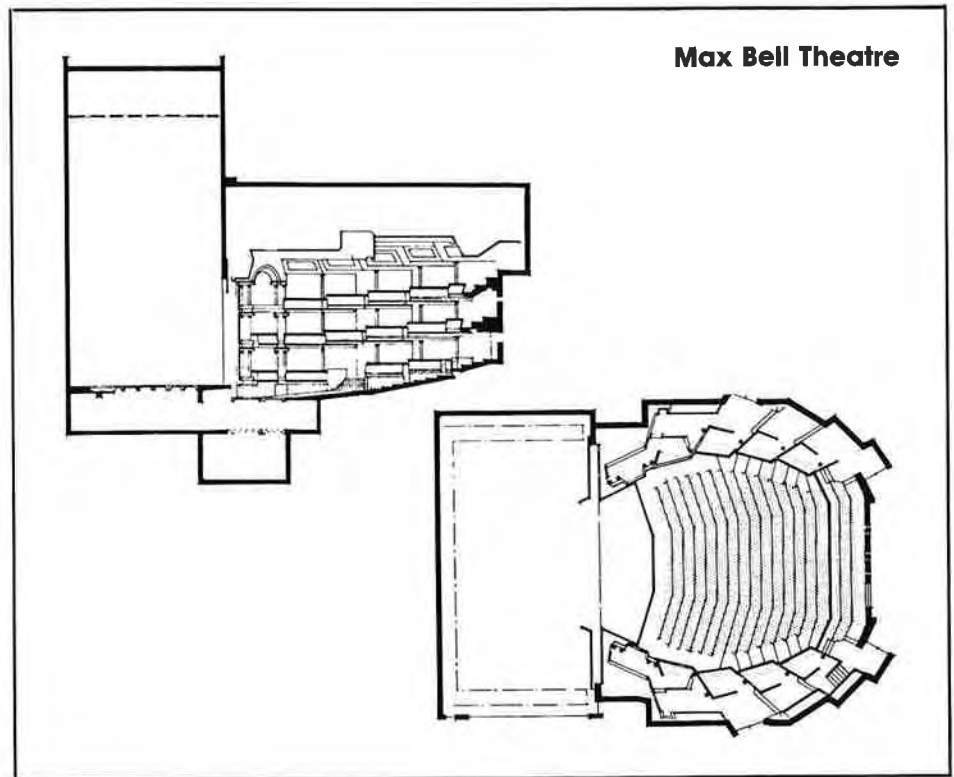
One of the biggest successes in recent months has been the triumphant opening of the new Calgary Centre for Performing Arts. on this multi-million dollar project (16½ million from Corporate Sources, 1 million from Federal Government and 12 million from the City) Theatre Projects had been involved since 1977, and, appropriately enough, it was the ubiquitous Richard Pilbrow that lit its triumphant opening on September 14th, when its glories were telecast across Canada.

The Centre for Performing Arts is more of an arts **district** than a centre. The total expenditure of 69 million dollars has brought together a complex of 200 seat Concert Hall, two flexible theatres, workshops and rehearsal spaces for the five separate organisations which it houses—the whole interlinked with lobby bars, restaurants and retail shopping areas. All this devised, designed and argued for by Pilbrow and Staples way back in 1978.

Five years from conception to birth is, by large-scale standards, extraordinarily good. The Kennedy Centre after all took 17 years to build, the Sydney Opera House 22, and our own Barbican a fairly debilitating 32 years. (It could of course be argued that the National Theatre—of which, needless to say, Richard Pilbrow is permanently engaged as Theatre Consultant—took a record 140 years, but that's another story). And through those five years the Theatre Projects team have been engaged on the complexities of acoustics, lighting and furnishing what has emerged as one of the handsomest arts complexes in the world.

It contains within its elegant shell another theatrical time bomb. When Pilbrow began researching the locality he was told there was indeed an old, shut-down theatre building somewhere around and, to his astonishment he actually found it, forgotten and deserted, on the proposed site itself. 'There it was,' he marvels, 'Extraordinary old building! Built of sheets of pressed tin, of all things, moulded to look like plasterwork!' He determined to preserve it, and it will indeed reopen, fully restored, in the winter of 1988, when the Winter Olympics come to Canada.

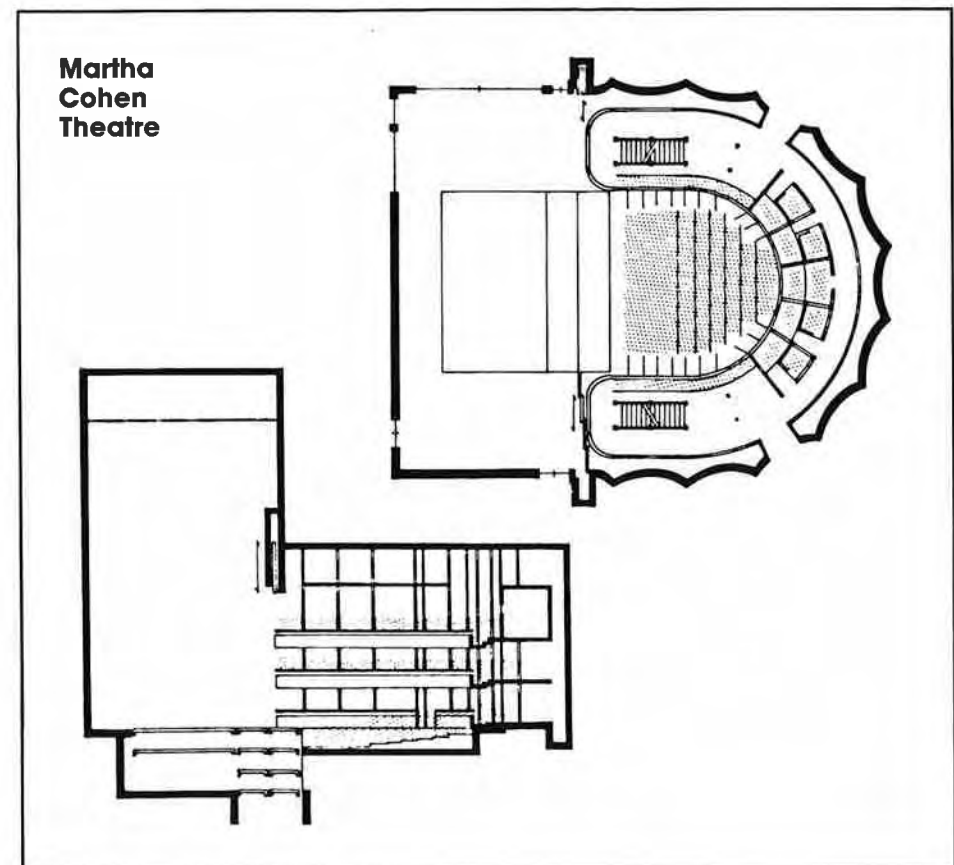
Meanwhile the centre has had its own explosively successful opening. But it was not just the C.B.C. nationwide telecast which pleased Pilbrow and Staples, it was the reaction of the locals. The day after the opening the city's new complex was thrown open to the residents of Calgary to wander in. 'I thought a few hundred people might drop in,' Pilbrow says. To their intense astonishment 12,000 folk pressed through the doors, and a further 10,000 were turned away. The local people spent up to three hours queuing on that first Sunday to get inside a building that, five years before, had attracted some hostility and a good deal of uninterest in the city. And, inside, they stood in the elegance of their new Jack Singer Concert Hall in a strange bemused church-like awe. 'It was,' Pilbrow shakes his head wonderingly, 'one of the strangest things I've ever witnessed.'



They know of course that the future will bring problems for Calgary as for every major arts complex. 'It's a six year cycle,' says David Staples, 'They are always delighted with it for two years, when everything in the building is new. Then things start wearing out, and there are staff changes, and the first deficits and things plunge downhill for a while. So it's only after about six years that you can say it's really run in and working.'

To which one can only say that there are buildings—though not those which Theatre

Projects have shaped—which have opened to something less than delight, and which can never be said to have worked at all. In their different ways Kuala Lumpur and Calgary are soaring on the crest of their first wave because Pilbrow and his team bring something more than detailed technical expertise in rigging, acoustical equipment and lighting—they bring knowledge of a totality than is very much greater than its technical parts. They have the extraordinary capacity to recreate in vastly different social, financial



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Calgary Centre for the Performing Arts—the heart of a growing city.



Martha Cohen Theatre: Bury St. Edmunds re-born near the Rocky's.



Control room of the Max Bell Theatre—the Premier control is North America's latest.

and geographic circumstances a theatrical **alchemy**—a knowledge of the ways in which the building's economy, its technical resources and its administrative practices interact and harmonise, so that all permit of the nightly miracle of the performing arts.

As we sit at the play, the opera or the ballet, we shall probably not think much of the people who designed the building, and who first created the links between the stage and ourselves, and who installed the lighting and the sound. If we think of such technical matters we shall probably only think of the crews operating them. But the reason for the miracle is nevertheless often to be laid at the door of the Theatre Projects team and their bright-eyed visionary leader. Later this year they will reopen the Kallang Theatre in Singapore, and already in 1985 they have opened the 900 seat touring venue at Enschede in Holland, and two theatres for the University of Riyadh.

And just in case we might think that only the vast and expensive is of interest to them, the team has been designing a 308-seater theatre for Grand Cayman Island in the Carri-



A row of narrow beam CSI floodlights used by Alan Russell to light up the main tower of the Putra Trade Centre.



Main auditorium of the Putra Centre showing house lighting using "egg crate" system, retractable seating, sound cluster in front of stage (in lowered position), electronic scoreboard and sound cluster in centre of arena area, and projection screen.



The Martha Cohen Theatre in performance.

bean for a total population of 16,000 people. Richard Pilbrow cannot resist one last global statistic. 'It is,' he says, 'the smallest National Theatre in the world!'

Note: John Offord also talked to Richard Pilbrow for this issue of L+SI and discussed the major changes that have taken place to the structure of the Theatre Projects Group. (See 'Profile' page 25).

Technical Information

Max Bell Theatre

Total seating capacity: approx. 750. (Without orchestra pit or forestage).

Stage Dimensions:

Proscenium opening adjustable by use of framed header panel, sliding side masking panels and moving side audience towers. Width: maximum 19.2m, minimum 10.04m. Height: maximum 8.0m, minimum 5.5m.

Curtain line to US wall: 10.15m.
Curtain line to DS apron: 3.7m.
Centre line to SL wall clear: 12.04m.
Centre line to SR wall clear: 21.94m.
SR wing free height: 9.15m.
SL wing free height: 9.15m.

Stage floor to under grid: 20.9m.
Stage Lighting:

Control location - back of auditorium, orchestra level control booth. Control System - Electro Control "Premier" with "Celebrity Plus" auxiliary/back-up console, designer remote, and hand-held focus remote control.

Designers remote may be operated from orchestra level. Focus remote receptacles all key lighting positions.

Circuits:

FOH:	4 - 50 amp
	127 - 20 amp
Stage:	8 - 50 amp
	82 - 20 amp
Pipe:	119 - 20 amp
Total:	12 - 50 amp
	328 - 20 amp

No patch panel; dimmer per circuit, 20 amp - new style twistlock, 50 amp - Joy connector.

Work Light System:

Logic switching system controls work lights used for load-in, rehearsal and performance. Controlled from SM position, control booth and local switches.

Permanently Installed Instruments:

100 - 15 deg - 50 deg zoom Lekos.
15 - 6 x 16 (23 deg) Lekos.
15 - 6 x 16 (31 deg) Lekos.

Available Instruments:

15 - Iris - 3 cyc floods, 1000W.
2 - Iris - 2 cyc floods, 1000W.
4 - Iris - 1 cyc floods, 1000W.
21 - Pallas cyc footlights, 500W.
54 - 6 x 12 (15 deg) Lekos.
18 - 6 x 16 (23 deg) Lekos.
35 - 6 x 12 (31 deg) Lekos.
50 - 6" Fresnels c/w barn doors.
20 - 8" Fresnels c/w barn doors.
40 - Par 64 1000W.

110 - 15 deg - 35 deg zoom Ellipsoidals.
40 - 20 deg - 40 deg zoom Ellipsoidals.
2 - Strong 1600W Xenon short throw Super Troupers.

Note: all above instruments are Strand Century unless noted.

24 - CCT 750W Fresnels, c/w barn doors.
24 - Colortran Mini, 500W, with 4 irises only.
4 - RMS Par can.
6 - Strand 1K beam projector.
2 - Clamer RDS 1K projectors c/w effects.

Shared by three theatres:

4 - Pani 2K effects projectors.

Sound:

Control location - back of auditorium, orchestra level in control booth. Mixing Console: Soundcraft 800B, 24 in., 8 out.

Tape recorders:
2 of Otari MX5050B, half track, 7.5/15 ips.
1 of Technics stereo cassette deck.
1 Technics turntable.

Speakers and monitors Installed - 2 channel cluster, centred above proscenium, Side proscenium, 8 BOSE 802, side and rear walls - 22 of JBL 4401 under balcony enhancement system.

Loose Equipment

Shared by three theatres:

Loudspeakers:
4 - JBL 4691, 4 - BOSE 802, 6 - ALTEC 1230 slant monitors.
Microphones:
20 - AKG-C451EB with 10 of CKI, 10 of CKIS, 2 of CK22, 4 of CK8, 20 of CK9, and 1 of AKG C 442 COMB, 2 CROWN PZM-30/PX-18, 10 of AKG D330 BT, 2 of AKG DIZE, 10 of SHURE SM-58, 4 of SENN MD-421-U-4, 6 of E-V RE16.
Also additional portable sound equipment.

Communications Systems:

Clearcom MS 200, 2 master stations provided, 3 separate channels to all out stations.
Out stations: 55.
Equipment: 10 belt packs, 16 single muff headsets, 4 mic/speaker units.

Stage Manager desk, portable, can plug in at SM control booth at rear of auditorium, orchestra level; in auditorium; and DSL.

Jack Singer Concert Hall

Total Seating Capacity: 1846. With full choir 2054.

Platform Dimensions:

Width downstage: 20.0m.
Width upstage: 20.0m.
Depth choir retracted to platform edge: 11.5m.
Depth choir extended to platform edge: 9.5m.
Elevator depth: 2.9m.

Wing Dimensions:

Width upstage: 4.5m.
Width downstage: 3.0m.
Depth: 10.75m.
Clear height: 4.3m.

Acoustics:

Canopy: Suspended above the platform and approx equal in plan area to the platform is the acoustic canopy. The canopy is clad in timber supported on a steel frame and hung from a number of motorized counterweighted suspension lines. The canopy may be raised and lowered to suit the acoustical requirement of the performance and to adjust the acoustical response of the hall.

Draperies: Electrically operated acoustic banners lowered from the roof space and hand drawn acoustic banners around the hall walls are used to adjust the acoustical response of the hall.

Stage Lighting:

Control location rear of auditorium adjacent to sound and stage management booth and rear orchestra level.

Control System Electro Control Celebrity Manual/Celebrity Plus with hand held remote focus receptacles at all key lighting positions, CCT lighting instrument colour change system.

Circuits:

FOH:	14 - 50 amp
	48 - 20 amp
Stage:	12 - 50 amp
	32 - 20 amp
Side Pipes:	0 - 50 amp
	24 - 20 amp
Totals:	26 - 50 amp
	104 - 20 amp

No patch panel other than local patch panel on acoustic canopy assigning 30 dimmable circuits to 40 receptacles, 20 amp - new style twistlock, 50 amp Joy connector.

House and Concert Lighting:

Preset conditions of house and concert lighting may be accessed from lighting booth, projection booth, SM booth, SM stage corner, concert managers position in hall and lectern. Concert lighting is directed from the canopy and is grouped to provide illumination of different areas of the platform and choir zones.

Work Light System:

Logic switching system controls work lights used for load-in, rehearsal and performance. Controlled from SM position, control booth and local switches.

Available Instruments:

48 Strand Century Par 64 cans.
103 Strand Century 15-35 degree zooms.
48 Strand Century 20-40 degree zooms.
7 laniro 4 cyc lights.
2 Strong Xenon Super troupers.

Permanently Installed Instruments:

16 CCT 8 degree Ellipsoidals with remote colour changers.
44 Strand Century 8 x 13 (13 degree).

'CLEAN GROUND' for Sound:

Location: Stage Left.
Capacity: 60 amps.
Phase: 3.
Wire: 4.

Volts: 480.
Cycles: 60.

Sound:

Control Location: Booth at rear of auditorium or at rear of orchestra level in pit formed by removing seats.

Mixing Console: Soundcraft 800B, 32 in., 8 out.
Tape Recorders: Otari 1/4", 1/2", or 3/4 track, Technics RS-M245X cassette deck.

Speakers and monitors installed.
Centre cluster lowers through acoustic canopy.
2 side stage towers on castors.
2 side wall towers track from side of hall.

Under tier enhancement system and side and rear wall speakers.

Communications System:

"Clearcom" MS 200, 2 master station provided, 3 separate channels to all out stations.

Out stations:
Equipment:
- belt packs.
- single muff headsets.
- mic/speaker units.

Stage Manager desk, portable, can plug in at SM control booth at rear of auditorium, orchestra level; in auditorium; and DSL.

TIE Lines:

Audio tie lines are installed from each theatre to a position in the loading dock for outside broadcast etc.

Projection:

Booth at rear of auditorium 1st tier level.
35/70mm Projector.
Screen: 7.16m x 15.85m.

Martha Cohen Theatre

Total Seating Capacity: 450 approx. (Without orchestra pit or forestage).

Stage Dimensions:

Proscenium opening adjustable by use of framed header panel and sliding side masking panels:

Width: maximum 21.94m, minimum 10.48m.
Height: maximum 7.8m, minimum 5.1m.
Curtain line to US wall: 9.25m.

Curtain line to DS apron: 2.6m.
Centre line to SL wall clear: 20.77m.
Centre line to SR wall clear: 10.17m.
SR wing free height: 6.65m.

SL wing free height: 6.5m.
Stage floor to under grid: 17.6m.

Stage Lighting:

Control location - rear of auditorium, in common control booth with sound and stage management.

Control System Electro Control "Premier" with "Celebrity Plus" auxiliary/back-up console, designer remote, and hand held focus remote control. Designers remote may be operated from orchestra level. Focus remote receptacles at all key lighting positions.

Circuits:

FOH:	6 - 60 amp
	122 - 20 amp
Stage:	8 - 50 amp
	29 - 20 amp
Pipes:	8 - 50 amp
	42 - 20 amp
Total:	22 - 50 amp
	243 - 20 amp

No patch panel; dimmer per circuit, 20 amp - new style twistlock, 50 amp - Joy connector.

Work Light System:

Logic switching system controls work lights used for load-in, rehearsal and performance. Controlled from SM position, control booth and local switches.

Available Instruments:

186 - 6 x 16 Lekos.
48 - 6 x 16 Lekos.
20 - 15 deg - 35 deg zoom.
10 - 6" Fresnels c/w barn doors.
30 - 8" Fresnels c/w barn doors.
5 - border lights, 300W, 4 circuit.
12 - IRIS 4 cyc flood, 1000w.
21 - PALLAS 4 cyc footlights, 500W.
2 - STRONG 700W Xenon Troupers.
Note: all above are Strand Century unless noted.

Sound:

Control location - rear of auditorium 3rd tier in common booth.

Mixing Console:
Sound Craft 800B, 24 in., 8 out.

Tape recorders:
2 of Otari MX 5050B, half track, 7.5/15 ips.

1 of Technics stereo cassette deck.
1 of Technics turntable.

Speakers and Monitors:
Installed - 6 BOSE 802; located house right and left at top two tiers,
12 - GALAXY Hot Spots, auditorium Loose Equipment shared by three theatres:

Loudspeakers:
4 - BL 4691, 4 - BOSE 802.
6 - ALTEC 1230 slant monitors.

Microphones:

20 - AKG-C451EB with 10 of CKI, 10 of CKIS, 2 of CK22, 4 of CK8, 20 of CK9, and 1 of AKG C 442 COMB, 2 CROWN PZM-30/PX-18, 10 of AKG D330 BT, 2 of AKG DIZE, 10 of SHURE SM-58, 4 of SENN MD 421-U-4, 6 of E-V RE16.

Intercom System:

"Clearcom MS 200", 2 master stations provided - 3 separate channels to all outstations, out stations - 45.

Equipment:
- 10 belt packs.
- 14 single muff headsets.
- 2 mic/speaker units.

Stage Manager desk portable can plug in at lighting/sound control room in auditorium, DSR.

Acoustics:

The acoustical response of the theatre can be adjusted by the use of acoustic banners and curtains.

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RICHARD PILBROW and Theatre Projects

The new, slim-line Theatre Projects operation is now all in one place in Langley Street, Covent Garden, and Richard Pilbrow has his particular corner on the third and top floor. Number 10 Long Acre has gone, and so have all the peripheral bits and pieces that mushroomed in the late seventies and early eighties.

It was no secret that the old multi-creative group was getting itself into trouble and would not last in the same format for long. Months and months of board meetings have been and gone, some interests have been sold off and others tidied up and trimmed in size.

In Pilbrow's words "we had to stop, or rather pause, after 27 years and take a look at what we were doing and what we **wanted** to do for the future. We identified the strengths and weaknesses and disposed of peripheral interests."

Some of the interests Richard Pilbrow calls "peripheral" would be looked upon by others, and that obviously includes the organisations that bought them, as highly important. But at the same time it gives us a clue to his own thinking and aspirations. He's one of theatres' born empire builders, with the constant urge to create something.

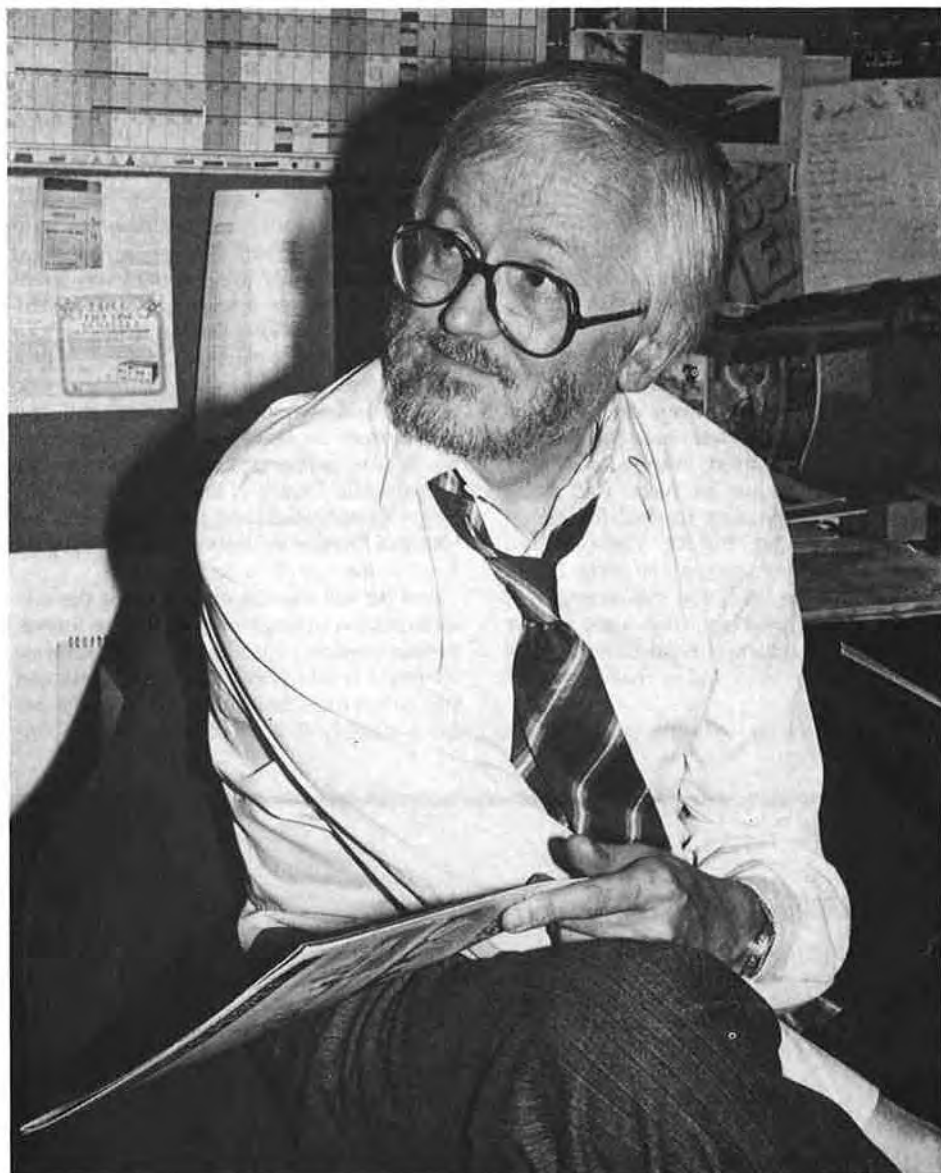
"We decided we wanted to do two things: to create things theatrical, and to produce terrific theatre. We'd ridiculously over-extended ourselves."

So Theatre Projects' future is these two things embodied under three headings: to design, to produce, and to offer theatre consultancy services. To do it they have a simple structure within which to operate. Theatre Projects Limited is the holding company, and Pilbrow its chairman and head. He is joined by David Collison (managing director) and Anthony Field (finance director). There are two main arms under the holding company's umbrella: David Staples heads up Theatre Projects Consultants Limited and Pamela Hay leads Theatre Projects Associates Limited. Other directors involved with consultancy include Iain Mackintosh, Alan Russell and Jeremy Godden.

Overseas there are two subsidiary companies: one in the United States (New York) and one in Canada (Toronto). The company has also retained a 25% holding in the original Theatre Projects Services Limited, now part of the Samuelsons Group. Richard Pilbrow also admits to a few "interests" in other businesses, but we won't mention them here in case he reads this column and starts empire building again.

The huge talent of Pilbrow—design, creation, motivation—and all those around him at Langley Street is proved beyond doubt when you look around the walls and along the shelves in their offices. Projects passed, projects current, and projects future can be picked at random from all corners of the office and they span all corners of the globe.

They will have up to 50 or so schemes on the go at any one time, about a dozen being



Richard Pilbrow.

actively worked on whilst others sit waiting for the next committee or council decision in city halls around the world. About 60 per cent of their work is from North America and there are feasibility studies in progress on more than 20 auditoriums in the US including projects in California (six at least), New Mexico, Texas, New York State, North Carolina and over the border in Vancouver, British Columbia.

The recent openings of the three-auditorium Calgary Arts Centre in Alberta Canada and the UMNO Centre in Kuala Lumpur in Malaysia are discussed in another part of this issue of **L+SI**. A new project about to be built is a 550-seat theatre in the new Beverley Hills Civic Center; already under construction in Portland Oregon is a twin-auditorium regional theatre complex due to open in late 1986. Over the border again in Toronto, TP's report on a new 2000-seat Opera/Ballet Theatre (and a 500-seat second space) for the Canadian Opera Company

and the National Ballet of Canada has been accepted. The budget is \$100m.

In Dallas their "master plan" for the cultural facilities needed for Dallas for the next 20 years has been accepted by the City Council. The report calls for spending of \$180m for the provision of an Opera House complex, and the authorities are already proceeding with land acquisition.

In California the refurbishment of a 1927 movie palace in Glendale to become the City's new performing arts centre has had its feasibility study presented by TP experts.

From the very biggest to the "smallest National Theatre we have worked on"—the Cayman National Theatre, a 308-seat auditorium constructed in Britain and shipped out for on-site assembly—Richard Pilbrow and Theatre Projects have by far the widest experience of any similar grouping in the world.

So how do they decide what equipment should be specified or recommended for

any particular project? And how do they compare standards of product worldwide? "I still think the best of British lighting controls are the best in the world—despite improvement of US products over recent years. As far as instruments are concerned it's hard to improve on things like CCT Silhouettes, for instance," said Pilbrow.

He feels there may well be a few surprises coming out of the US when the second generation of Varilites hit the market. "They are beavering away in Dallas to make them cheaper and therefore more within the reach of smaller theatres.

"A surprise this year was the TBA Technology Magic Lantern. If it works as well as the prototype did it will be fantastic. Tim Burnham has remembered one of the principles of lantern design—that it should be compact and neat. It's brilliant."

On the question of sound equipment David Collison joined the discussion. "The British make the best mixers and seem to lead in that area—it was years before the Americans even started. In the UMNO project in Kuala Lumpur we have used desks from Technical Projects Limited (based on the Isle of Wight), but US high-powered loudspeakers (Electrovoice and Altec for instance) have the quality in this direction. A Japanese sub-contractor took care of the amps, graphic equalisers and other control equipment, and they did a really fantastic job."

Low note as far as Collison was concerned

was that "in English-speaking countries we always find it difficult to get good sound contractors to handle the work."

Having decided on particular equipment, whether lighting or sound, the over-riding factor is whether or not it can be serviced and maintained by a dealer or agent within the country of installation. "We have to recommend equipment that has back-up in the country. In many cases consultants can lead the way. We have actually helped introduce dealers into a country," explained Richard Pilbrow.

Despite all this activity worldwide, the producing side (TP Associates) is, you feel, where Pilbrow's main interest now lies, with some lighting design thrown in for good measure. Currently the company has 'West Side Story' set for a long run at the Manchester Opera House, and an overseas tour may follow. For 1986 he is looking at producing two musicals, one new and one revival, and two plays—one new and one due in from Broadway. On the design front he lit the opening Gala Concert at the Calgary Arts Centre in late September (Jack Singer Concert Hall) and this month is at the National Theatre in London lighting 'Love for Love' in the Lyttelton auditorium.

And he will also be championing the current cause—pushing away behind the scenes to save London's Lyceum Theatre as a venue for major productions. "It is the biggest, and one of the most beautiful theatres and it will be a tragedy if it's lost. We lost the first

round, but it will be a 15-round fight to keep the place alive."

But maybe Richard Pilbrow and Theatre Projects' pièce de résistance is yet to come. The company is commissioned to design the final phase of the expansion of the BBC Television Centre—a television theatre to replace the old Shepherds Bush Empire.

"They want the character of theatre within the latest adaptable auditorium design to incorporate the latest in television techniques". Design work is under way and a concept established to produce an auditorium for almost every conceivable type of show, with a proscenium that can reduce from 90 feet to 30 feet. It will have all the latest video, lighting, sound and rigging equipment, and come on stream in the 1990's.

Richard Pilbrow, as confident as ever, predicted that "if Garrick walked on stage, he'd feel at home."

John Offord

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**THEATRE
PROJECTS**

Spotlight on 'Top of the Pops'

Joanna Turner talked to Robert Wright, Head of Television Lighting at the BBC, and Lighting Director Eric Wallis about the background work involved in setting up television's major light and sound show.

Eric Wallis, secretary of the Society of Television Lighting Directors, was the lighting director responsible, in that particular six-week spell, for the BBC 1 programme 'Top of the Pops'—recorded on Wednesday September 18th and broadcast on Thursday the 19th. Background work began on Monday the 16th, and I caught up with the operation on recording day to see a somewhat tacky-looking studio transformed into a colour spectacle all set up and ready for the day's audience and television recordings in the early evening. How was it all achieved?

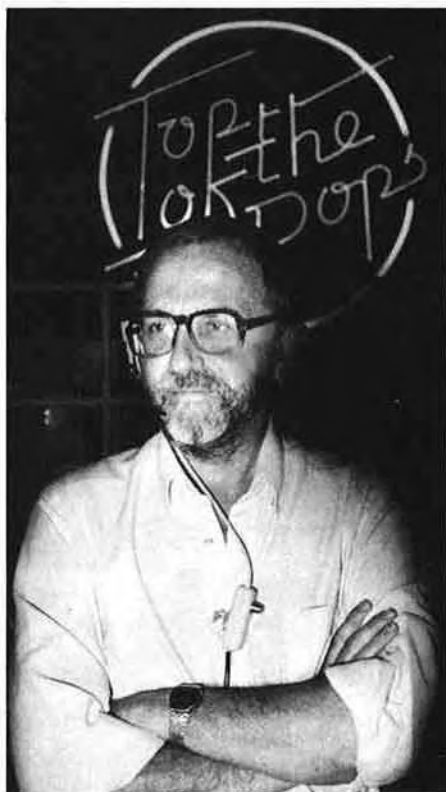
The answer is by three days of hard work, within a very tight schedule, and close co-operation between the lighting director, the scenic designer (Katy Atty), and the visual effects designer (Andy Lazell). Even with a major television show like Top of the Pops studio time is strictly limited, and the fact that the pop charts aren't published until the day before the recording session adds to the pressure by compacting the time available into a very short duration.

The only normal thing about lighting designer Eric Wallis's week is that it begins on a Monday, when he roughs out the basic lighting plot. He will know by then which studio has been allocated to Top of the Pops for that particular week, and the set-up of that studio—for the week in question it was Studio 6—and this will have to be vacated by the previous users in time for a Tuesday morning rigging-up session by the 5-strong team of electricians.

At 9.30 a.m. on Tuesday the planning meeting takes place at which the producer, lighting director, production designer, technical co-ordinator, make-up designer, costume designer, camera supervisor, and sometimes the electronic effects designer listen to the discs selected, decide the running order and treatment of the songs and format of the programme.

Eric Wallis then takes copies of the discs to listen to and moves into the drawing office to finalise the plot, having by this time decided the colours he will need, and the effects he wants to use in the show. Close liaison with the scenic designer now becomes important in terms of incorporating neons into the set, floor lamps under it and the overall endeavor to create an atmosphere of lighting and scenery working together as one. Special effects are then added to the equation to provide the finishing touch.

Once the outline scheme is finished, and the required gels are ordered, the plot is given to the electricians so that the necessary equipment can be obtained from stores before the scenery starts to come in.



Eric Wallis: "Visually we follow the pop industry and try to reproduce in the TV studio the excitement of the pop concert and the best discos".

The Top of the Pops show is a major operation for the BBC's electricians because basically it uses the studio in warehouse fashion, ignoring much of the standard rig resident in any studio and hiring in much extra equipment. From a production viewpoint it could be described as a semi-resident roadshow, starting almost from scratch week-to-week.

Recording day (Wednesday) starts with a 2-hour session setting the lamps, before camera rehearsals begin at 11 a.m. Eric Wallis then moves up to the gallery and inspects the pictures coming up on the monitors, leaving assistant Geoff Thonger to carry out adjustments from the studio floor. Having made sure all the lamps are in position, by the time of the first run-through all facilities will be at his fingertips, all effects ready.

Meanwhile vision supervisor Roy Adcock and his assistants have been plugging up all the ancillary equipment installed in the gallery, and setting basic memories on the lighting console.

By now, barring major hitches, most of the work is done. Although during the day

alterations and adjustments may have to be made, and any lights not rigged up to the rock board will be controlled manually during the recording of the show.

By 6.00 p.m. all rehearsals will have been completed, and recording of the chart run-down and chart-breakers will also have been concluded. Apart from cheer-leaders who will be making friends with the day's audience, all those concerned with the production will take an hour off to eat and relax before returning to the studio for the sound and vision line-up. If all goes to plan recording should commence at 7.30 p.m. and the show, although pre-recorded, is treated as "live" and runs for its allotted 30 minutes. Any problem patches that the producer feels need improvement can then be re-recorded and edited into the tapes. Pre-recorded videotape sections will be inserted during the running of the show.

Occasionally, when things like Bank Holidays intervene, the show comes out live on the Thursday, but as Eric Wallis commented it doesn't have that much of an effect except in that it tightens the schedules somewhat. "The principle is to record Top of the Pops as live, so that when we do have to do a live show, it's no great hassle. It's good—it gets everyone tingling," he told me.

Planning for Top of the Pops as far as the lighting is concerned is quite different from many other television productions. The show is a cross between a pop concert and a disco, and therefore has to combine the lighting effects of both—that is, to emphasise both the stage with the performers on it, and the dance floor. Also important from a planning viewpoint, is the fact that for many young viewers, it may be the one time they get to see their 'idol' and so close-up shots must dominate. This involves quite a different approach for the lighting designer because rather than planning with camera angles in mind he must start with a portrait of the artist or Disc Jockey, and, using wide-angled shots, follow up with lighting and effects to create the general atmosphere.

One of the most enjoyable things about working for Top of the Pops for a lighting director is the challenge of trying to incorporate new equipment and effects as and when they become available. Bob Wright, Head of the BBC Lighting Department, told me: "I know a lot of producers around the country who have nothing to do with pop shows, who watch Top of the Pops to see what's new; not only in terms of lighting equipment, but what effects are being used, and how. We tend to use Top of the Pops to



Area A, the 'master area' for production of Top of the Pops with back projection area on the left and the show's logo on the right. This was used by the group 'Red Box' for performance.

try out new things, and the producers and directors are very good in that area; in fact they are more experimental than most."

I asked Eric Wallis how he hears about new equipment. "As Secretary of Television Lighting Directors, I am on various mailing lists, and information is coming to individual members all the time, so I also hear from that source. Because of the sort of programme it is, I also make a point of visiting discos and watching pop concerts occasionally, to keep up to date on what's happening outside. I go to hirers on occasion, if I hear they've got something new, and they then demonstrate what they've come up with. Manufacturers usually only contact us through the hiring companies although within the BBC all the information goes to the Head of Lighting. Occasionally we have lighting director meetings where manufac-

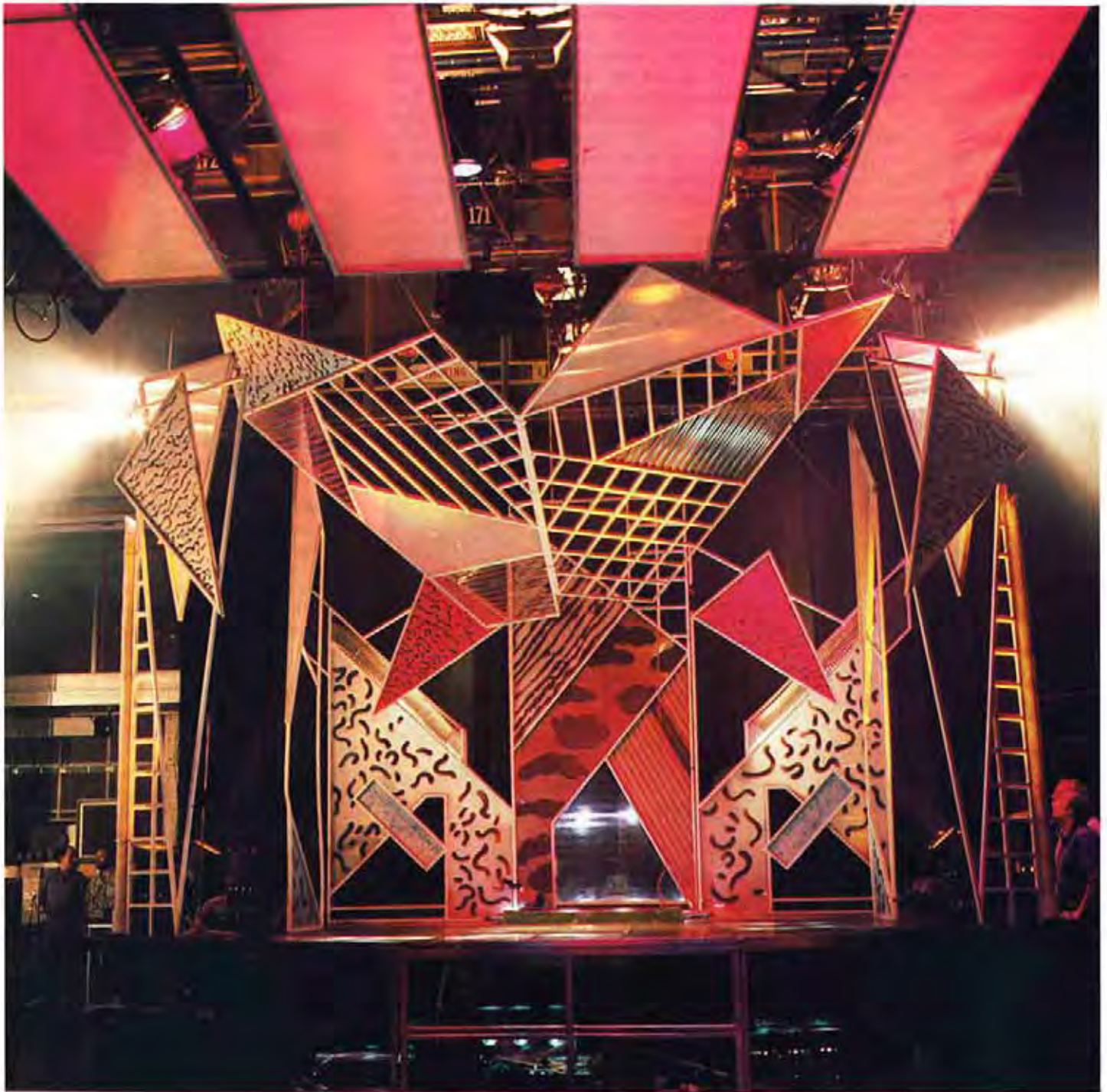
turers come and demonstrate their latest equipment. They take over a whole studio, put all the gear in, and everyone is invited to come down and play with it and meet the representatives. This happens fairly frequently; about every three or four months."

The equipment that was being used the day I visited Top of the Pops included: standard Berkey luminaires, CCT effects lanterns, IRIS 4 for cyclorama lighting, Antares as a soft source, parcans on pre-wired bars, pin spot battens, a light curtain, Meteorlite 8 Light units or 'audience blinders', and lots of ray lights. The above include standard equipment which would already be rigged in the studio, and equipment hired from their two main hirers for this particular programme, Playlight Hire Ltd, and Meteorlites Productions Ltd. The mobile effects are hired from Richard Martin Lighting, and for this show

comprised of contra rotating twists and pillars, Sparklite battens, HMI guns, and Rafal Tubes.

It is interesting to note that there are limitations to the lighting effects that can be used on Top of the Pops because they have to be suitable for recording through the eyes of the camera. Lasers for example cause many problems with reflection of metal structures in the studio, and interference with the television signal.

The scenery is built to incorporate neons, which had been designed by a BBC designer, and manufactured for the BBC by Desart. Special effects used were dry ice and smoke, which was directed through a wind machine. The lighting console used was a Strand MMS console in conjunction with a hired Avolite 12-way rock board. An Avolite Ultra Chase II was used for the neons, and a Zero 88



Area B with its 'stage scenery' setting was used by Midge Ure.

Eclipse portable effects desk was used for chasing and sound-to-light sequences.

Whilst talking to various manufacturers before visiting Top of the Pops studio, I had heard that the BBC had a reputation for requesting modifications to almost every piece of technical equipment they bought, but that this seemed not to be the case these days. The main problem with lighting equipment used by the BBC is that it has to satisfy the highest standards of safety and robustness because of the treatment it receives during the course of its life. As Bob Wright said, "the main criteria are primarily safety, robustness, durability and effectiveness. There is a department called Studio Capital Projects Department which does a lot of the installation of new equipment. They will go out to the manufacturers if one of the lighting directors has seen something which he thinks

meets the specification and would do the job he wants, and they will look at the lamp, probably borrow it for a while and do some measurements on it, look at its construction and see whether it is robust or safe enough.

"They would probably come up with quite simple things, for example, some lamps are held together with pop rivets whereas the BBC prefer nuts and bolts for safety reasons. The manufacturers concerned have often complied with these requests and changed things to suit our specifications. Because the BBC's safety standards are so good, some manufacturers embody these modifications into all their equipment. For example Zero 88 were making a lighting control desk which the BBC looked at and liked, and the modifications they made were actually adopted for wholesale manufacture."

One piece of standard equipment the BBC

use a great deal was designed specifically for the BBC by Berkey, and is now used in other fields as well to some extent. This is the Berkey luminaire which is designed to produce both soft and hard light. Before this, one either had hard light or soft light luminaires, but these 'twisters' as some people call them have been reasonably successful. Hard light can easily and quickly be changed into soft light simply by turning the lamp around, and the power intensity can also be altered at will.

Eric Wallis thinks that for other standard luminaires the standard is good, technologically. "We are using these lights every day of the week, so they've got to be strong, safe, and come up with the goods regularly. They must not need a lot of looking after because we can't keep taking them out to service them. I think the lamps outside

reach a standard without the BBC pushing all the time. Generally we buy most things off the shelf these days because if you do order things specially you've got to make it worth while to the industry: it costs so much to develop a new lamp."

And what about the standard of equipment hired in? "Most lamps now meet our specifications. Certainly any other odd lamp which we don't normally use goes through our safety department anyway. We are not allowed to use it unless it's safe, and they might make small modifications. Every light which we hire goes through our workshop for a safety check, and an engineer goes to the hirer to see that he works within the BBC

standards of safety. They've got to stand up to being put in, changed around, taken out, sent back to the hirers etc. Most luminaires go up and stay up, but those going in and out do take a bit of hammering. They have got to be safe electrically, so the BBC does specify certain standards of safety that they have to meet. Before we ever used Richard Martin's stuff, our engineers went to see him to see if he met our standards. But even so, all his rotating devices you'll see here have been put in cages in case any pieces should fly off. If that happened in a television studio, with the amount of other equipment around, it could be a very dangerous and expensive accident. You won't have the need



Bob Wright: "We tend to use Top of the Pops to try out new things, and the producers and directors are very good in that area; in fact, they are more experimental than most".

for this in discos, because once they're up they stay up, whereas ours come on and off the rig all the time. It was a bit of a bind, but Richard Martin have met all our standards before, and they made the cages for us."

The cost of hiring all the equipment for the show is met by the programme budget, a proportion of which is allocated for this purpose. The lighting director will go to the producer and explain that for a certain effect he wants to achieve he needs to hire a particular piece of equipment. If it is too expensive, the producer knows that the lighting director, if he can, will get around the problem one way or another. If this is not possible, the producer will accept this. Michael Hurl, the executive producer, appreciates how important lighting is to a programme like Top of the Pops, and makes sure that a realistic portion of the programme budget goes towards hire of lighting equipment. The BBC avoids having out-of-date-equipment on its hands by only buying what is called 'work horse lanterns', which can be used on any type of programme. Any specialist equipment, like the Harvester or Cosmis Balls, or anything that might go out of fashion, it is policy to hire. "If we're looking for a long-term hire for Top of the Pops, we go out to tender to the hirers, and seek the most competitive rate," explained Bob Wright. At the moment about 10% of the actual total lighting used on Top of the Pops is hired.

Eric Wallis's view is that lighting is a very potent force in the Disco and Pop world, and the equipment has become very sophisticated, producing the most exciting results. "There have also been more subtle changes, such as the introduction of scenery. With a programme like Top of the Pops, what happens over the next few years will be dictated by what happens outside. Visually we follow the pop industry and try to reproduce in the TV Studio the excitement of the pop concert and the best discos," he said.

And a final note for the industry: in addition to its regular hire requirements the BBC spends £1½m annually on lighting equipment as part of its capital programme of regular refurbishment of studios across the UK.



Area C, base for Lloyd Cole and the Commotions, is linked by 6' high bridges to areas B and D in the Top of the Pops studio.

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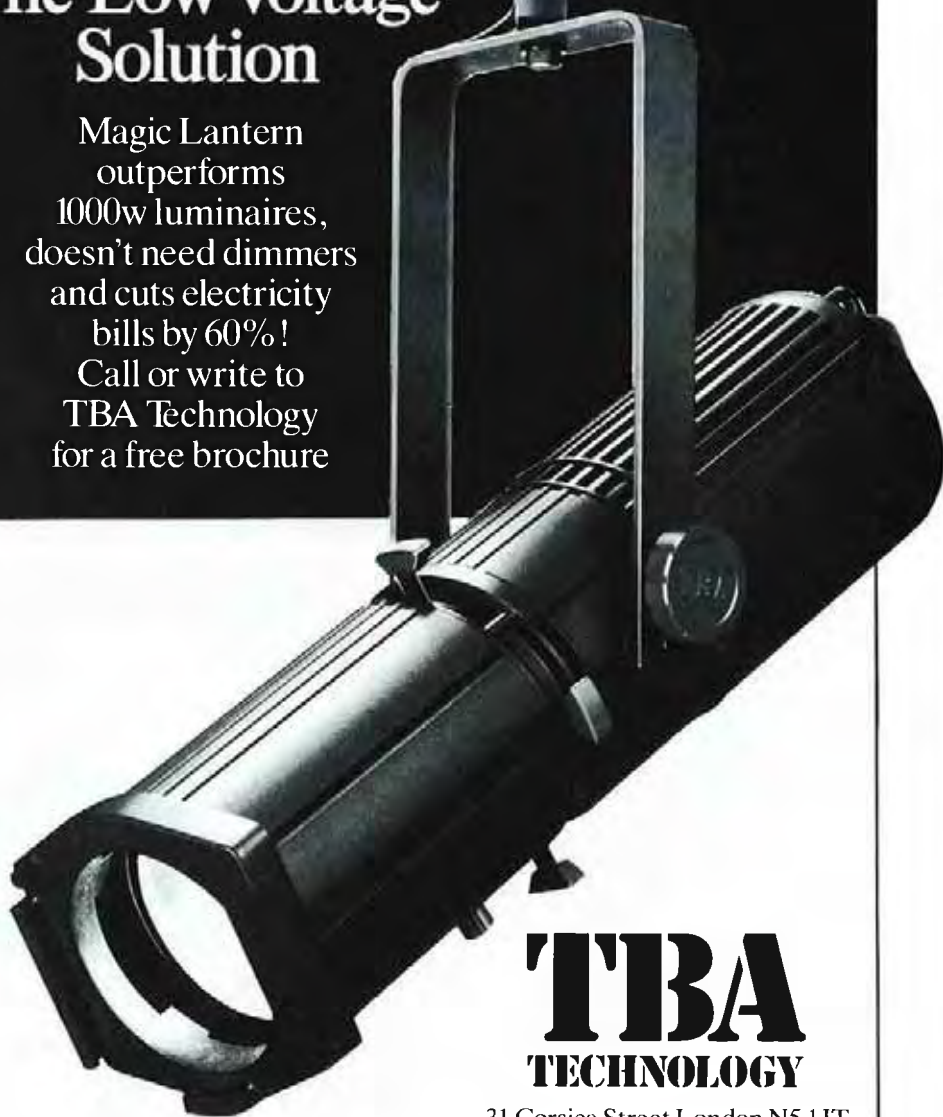


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All The World's A Stage

TONY GOTELLIER asks why no one has so far designed and implemented a truly flexible discotheque environment based on theatrical principles of stage sets to create new scenes or productions.

There are sufficient parallels to be drawn between theatre and discotheque to suggest, as others have done, that they are of the same genus. Which of course they must be since both resulted from the human need to relax and be entertained by others.

Clearly there are some major differences, but I shall argue that these are of emphasis rather than of essence. For example, in discotheque part, at least, of the audience becomes the cast. Here I refer to the more extrovert poseur types who effectively, through their exuberance and the flamboyance of their costumes, provide free entertainment for the majority who generally come to watch and thus form the real audience. Many of these characters should carry Equity cards and, come to think of it, probably do!

The dance floor therefore becomes the stage providing a kind of theatre-in-the-round and, while there is no prepared script as such, things proceed to a structured pattern by some sort of unwritten convention. Of course one major difference between the two is the semi-tribal ritual between the

sexes which is played out in the discotheque. However, I don't think that this in any way affects the main thrust of my thesis.

One other factor which both have in common, and this is the essence of the argument, is that both are dealing with a fickle and constantly changing audience. What is successful this year or even this month, may well fail the next as the tastes and aspirations of the audience alters as the new generation moves in and the old one is lost as a market. Indeed discotheque is subjected to the whims of fashion to the point where its appeal as a fixed entity is limited by its own self-destruct mechanism ticking away like a time bomb from the day a club first opens.

Anyone who has seen a discotheque in daylight, following a night time visit, will know that all's an illusion or more accurately a trick of the light. Some of the world's most exclusive night clubs look decidedly tacky under cleaners' lights. As I know from my own experience, holes in the upholstery the size of fists, due to careless use of cigarettes, can often be clearly seen during the day but never noticed by the customers in the glow

of the evening ambience.

Despite all this we seem to have failed to grasp the basic lessons that theatre can provide. Having recognised the parallels why don't we draw more from the techniques developed over the centuries rather than sticking to our existing 'bricks and mortar' mentality? O.K. discotheque has borrowed from theatre. In lighting for example, there has been much cross fertilisation in both directions and to the benefit of each, as Starlight Express amply demonstrates. And many theatres and cinemas have become discotheques, but simply utilising the buildings and turning them into discos is not in my view, the answer. Especially as in such cases the building is used solely for the architectural atmosphere and volume of space and is generally carved around to fit some preconceived notion of what a disco should be.

Interestingly enough, in the one example where the above was strenuously avoided, the imagineers got closer to achieving the goal to which I am alluding, than anyone before or since—although it could have been



Studio 54: "It must be considered the world's most successful discotheque ever and certainly the most globally notorious."

taken even further. Yet it must be considered the world's most successful discotheque ever and certainly the most globally notorious. I refer, of course, to Studio 54 in Manhattan.

Stranger still, in view of its success, it was Studio 54 which first focussed the industry's attention on the relevance of theatre. Particularly when Andy Warhol defined its appeal as giving "everyone the opportunity to be a star for 5 minutes." Despite worldwide publicity and the droves of disco industry luminaires from Europe and elsewhere the response has been limited to a recognition of the theatre's potential as a structural entity. However, if we examine Studio 54 more closely we will see that because of the unusual nature of the building, it was more able to fill the role I am envisaging than most conventional theatres. Furthermore there is considerable evidence that a conscious effort was made by Rubel and Schragar to achieve the theatrical flexibility to enable the creation of new formats as desired.

Admittedly because the building had previously been used as a film studio, the stage and the flies extended well into the amphitheatre certainly extending beyond the lower stalls in a conventional theatre. But then they grasped the potential that this provided and even persuaded the Metropolitan authority to allow drops of both scenery and lighting to the floor in performance on the basis that the dancers below were in effect performers.

Furthermore, considerable use was made of the flies to provide drops which created new 'scenes', many of which were highly dramatic, but more importantly the flies



Tony Gottelier.

could also be used to alter the shape and size of the auditorium.

One simple technique was to divide the dance area with a scenery drop in order to reduce its apparent size, or to provide function facilities on the other side. This always created a moment of great excitement when, in the early hours, it would disappear almost imperceptibly bringing the two groups together.

Elsewhere the furniture was portable, indeed the sofas were inflatable, no fixed banquettes and other decorations minimal providing the opportunity to dress the interior

to suit a particular theme or promotion. Indeed, they once turfed the entire dance area for a Valentine's night party!

The gallery was left virtually untouched with the original cinema seats which again helped to emphasise the theatrical connotation.

So what would be required to apply this concept in a commercial and practical way? A suitable building, an enlightened client and a commonsense designer should provide the mix. Decor would be minimal and concentrated on scenery which is essentially demountable and portable. Decor lighting would be oriented to provide colour washes which can be gell changed at will. Furniture would be essentially unfixed and light and sound movable and adjustable in both a 'before-your-very-eyes' sense as well as in a pre-planned restructuring. In this way almost the entire club and certainly the dance area and its immediate environs becomes a stage set with all the possibilities of new scenes, new sets or whole new productions as required.

I can already hear the Jeremiahs saying "It can't be done" but having seen an entire discotheque interior, bars, counters, furniture, the lot, transported from France and erected in Germany in a matter of days it is certainly possible especially if you have the space to play with.

With the outstanding success of Studio 54 recognised everywhere and the emergence, in London at least, of portable clubs and one nighters creating pressure from the street; it seems astounding that nobody has so far designed and implemented a truly flexible discotheque environment based on these theatrical principles.

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A Night Out at the Dome

John Offord visits First Leisure's "most spectacular discotheque in the world".

Just two years ago Lord Delfont's First Leisure Corporation embarked on an £8m refurbishment spree embracing the group's 14-strong chain of major discotheques, with the last two coming live in October and November this year.

And "live" is the appropriate word, because although Birmingham Dome (formerly the Night Out) and Paradise Lost in Watford (formerly Bailey's) were former cabaret-style venues, they will be featuring

live entertainment as part of their programme. At least this is what the management at the Dome has already promised, and they've certainly invested in the technical equipment and personnel to back up their pre-opening statements.

As manager Dave Sims explained: "This will be the most spectacular discotheque in the world and will rapidly establish a new standard for entertainment quality and up-front sounds. We will be featuring major groups as

well as local bands and our audience of over 1700 will expect the very best. The in-house lighting rigs can match that of any venue in the country in terms of both concert stage lighting and effects. Our sound systems are superior to most top international groups in both power and sophistication, whilst the control and monitoring computers are the most comprehensive state of the art consoles to be found anywhere today."

The idea is that groups will feel perfectly at

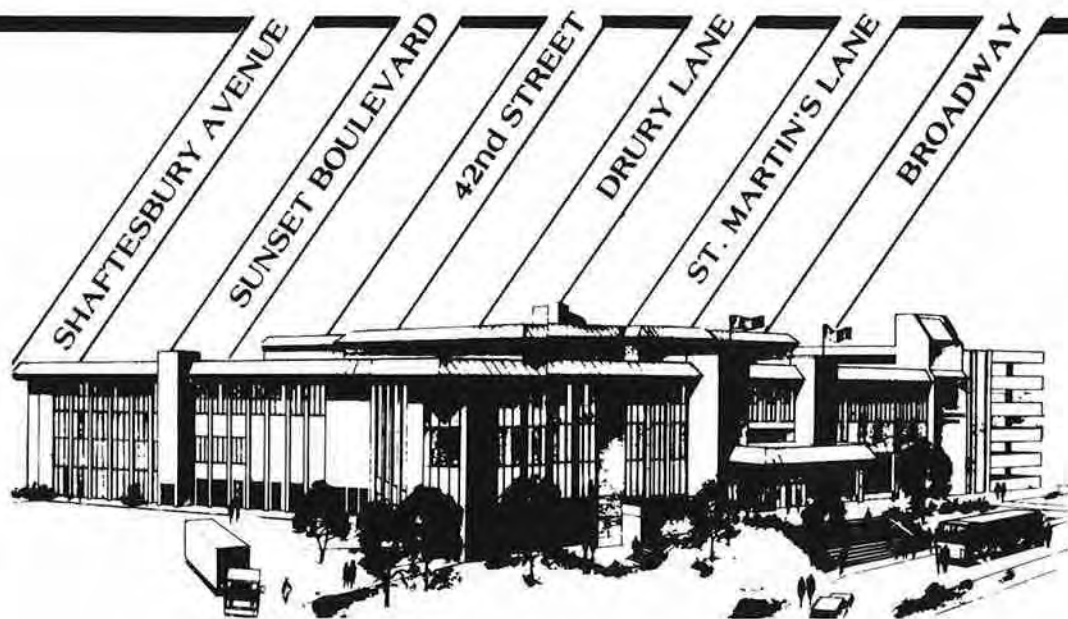


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home in the venue whilst promoters of up-and-coming bands will be able to exploit the Dome's in-house facilities of world-class lighting, sound and effects at vastly reduced overheads in terms of transport, equipment and crew cost. First Leisure's statements can be backed up by the fact that around 35% of the £1.2m. spent on establishing the Dome from the four bare walls of the original 'Night Out' has gone in the direction of technical equipment according to group managing director John Conlan.

So live entertainment **will** be presented, but its form will be somewhat limited because all that happens (apart from fringe activities that can be scattered around the building) has to happen within the area of the Dome, and vision is therefore through the metal structure covering the dance floor and stage section.

But this has to be the one and only (and minor) criticism of a complex that is pure spectacle from start to finish. The Dome's gaudy but up-market style is deliberately aimed at the young extroverts who go to see and be seen. Technically, it has everything to show off about as you can see from the visuals and equipment lists accompanying this article. And the decor reflects back on the lights: over 5000 individual mirrors, about 30 tons worth, all individually cut and bevelled and in either silver, grey or black have been fitted around the walls of the main auditorium space.

Facility-wise it's just as lavish, with three restaurants—à la carte, pasta, fast food—and nine different bars. Viewing areas and walkways abound, and different parts of the complex have their own personality and atmosphere. Technically they can also be isolated or spotlighted by light and sound.

And you can understand why First Leisure have put so much effort into making their discos up-market and "different". At the last annual general meeting of the company Lord Delfont stated that the highlight in the group's 50% profit increase had been "the excellent results from our chain of discotheques".



The Dome: pure spectacle from start to finish.

In fact the only two operations that did not come up to target or expectation were the two remaining theatre restaurants, Bailey's and the Night Out—the last two to get the "treatment". In a recent press statement Delfont said he considered live cabaret was declining in Great Britain: "Although my own roots are strongly in live entertainment, we have to face facts. Live cabaret is declining all over the country, because the top acts have priced themselves completely out of the market and there is a tremendous shortage of acts that can draw 52 weeks a year".

So, taking the cue from proven success, how do First Leisure go about a conversion job, and produce for example at Bristol Papillon the "most sophisticated" disco, at Watford Paradise Lost the "most beautiful" and in Birmingham Dome the "most spectacular" discotheque in the world?

Well, for a start, the management is accountable to the company's directors and shareholders and not, as in local authority projects to local councillors and ratepayers.

So schemes happen in months rather than years. And we **are** talking about very major projects. When I raised eyebrows in initial disbelief at the time-scale involved in converting the Night Out to The Dome, First Leisure's press man on the spot merely admitted that "it **had** been one-and-a-quarter million pounds worth of panic". (The Night Out closed on June 1st, 1985, and The Dome opened for its preview on October 16th, 1985.) Without bothering to count the months and days, it does tend to compare rather favourably with all the local authority and subsidised theatre and civic hall projects I've witnessed over the past twelve years.

John Conlan took me on a run-through of their decision-making process. "Having decided upon a general idea and theme for a particular place we will appoint the design consultant we feel appropriate for the particular job," he said. On occasion this will be by an initial competition between two consultancies. "Basically we ask them to give us some ideas." Group Northern Design, who



The Dome complex houses nine different bars.

have produced several schemes for First Leisure including Pagoda Park in the same City, were appointed for The Dome project.

By the time a decision has been reached Michael Payne (operations manager for discos), Shaun Doyle (technical manager) and Nick Tamblyn (commercial development director) will have been fully involved, and it is the last-named "who makes things happen" in John Conlan's words.

Nick Tamblyn is highly respected by the technical crews on site as a person who knows what he's talking about—"an operations man who knows everything through from bars to lighting"—was a comment made to me by technical staff at The Dome.

And here is a major ace in the whole chain of First Leisure's decision-making-into-action process. The skill and judgement of those at the top, who can make quick decisions with confidence, is echoed at grass roots by young managers who know what they're about, and will work on until the job's done.

To home-in on the two technical men who's task it is to make The Dome work in its own spectacular fashion is the major point of this article for Lighting + Sound International.

Martin Tasker (billed as stage manager) is in charge over all things technical at the venue, and he has a particular interest in sound. Deputy stage manager and lighting engineer is Andy Pound. Both in their mid-twenties, they have been there to see that sound and light came through loud and clear on the night.

Martin Tasker was called to divisional headquarters of First Leisure at Leicester in May of this year for a first viewing of the Dome project. "I was the only person to see it. I was briefed and shown the designs and asked what I would need to do the job. It was all conceived in an afternoon," he told me.

Lighting Effects of Leicester were to look after the special effects side of things and it was left to Tasker and Andy Pound to co-ordinate the rest. Part of the teamwork legendary amongst technical men in all branches of theatre and entertainment helped, as different venues in the group exchanged



Andy Pound (left) and Martin Tasker pictured in the Dome's control room on opening night.



Lord Delfont inspects the Dome on preview night with staff member Irena Tomkowasky, operations director Mike Payne, general manager Dave Sims, and bar supervisor Sharon Holden.



In the Dome on opening night.

1000 turned away from The Dome on Opening Night

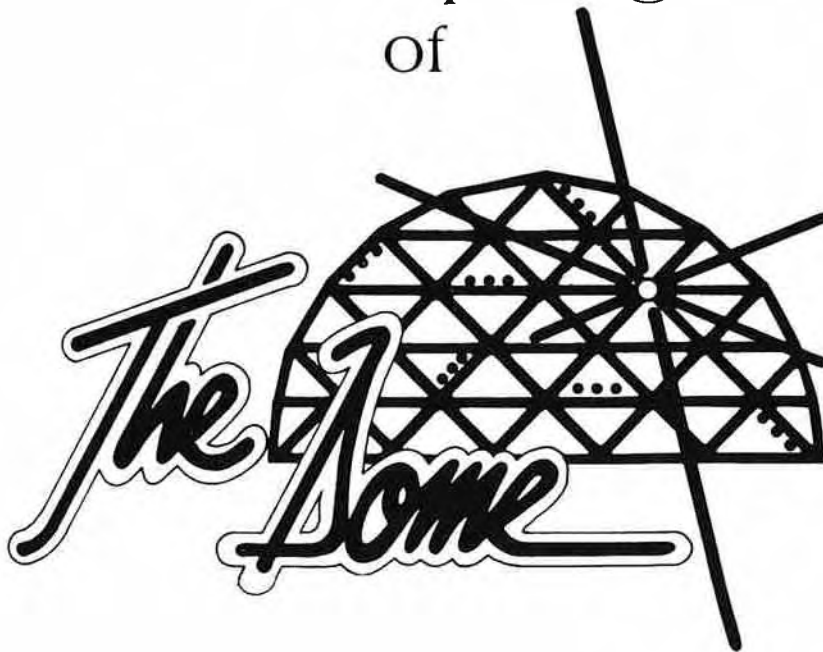
Early on launch night (Thursday October 17), massive crowds gathered and queues grew trying to be the first to experience the Dome on its first day of business. By 10.30 p.m. the venue was packed but despite house full notices, the crowd would not disperse.

General manager Dave Sims said: "There must have been over a thousand whom we just couldn't let in. I tried personally to apologise to as many of the crowd as possible, by they just didn't believe they couldn't get in and stayed put. We still had people waiting outside at 1 a.m.

On Saturday October 19, crowds gathered again and 500 had to be turned away.

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The Dome from within—see equipment plan below.

equipment, or it was taken from general stock with new added as needed. (In the list of equipment given at the end of this feature, the newly-purchased equipment is shown printed in bold type.)

On the sound side the conception was to "hammer the dance floor". There are three separate sound systems in the main area: one to the dance floor, one (intermediate) for the bar walkways, and a quieter one for the back of the auditorium area. "The high energy stuff is in the centre, under the Dome," said Tasker.

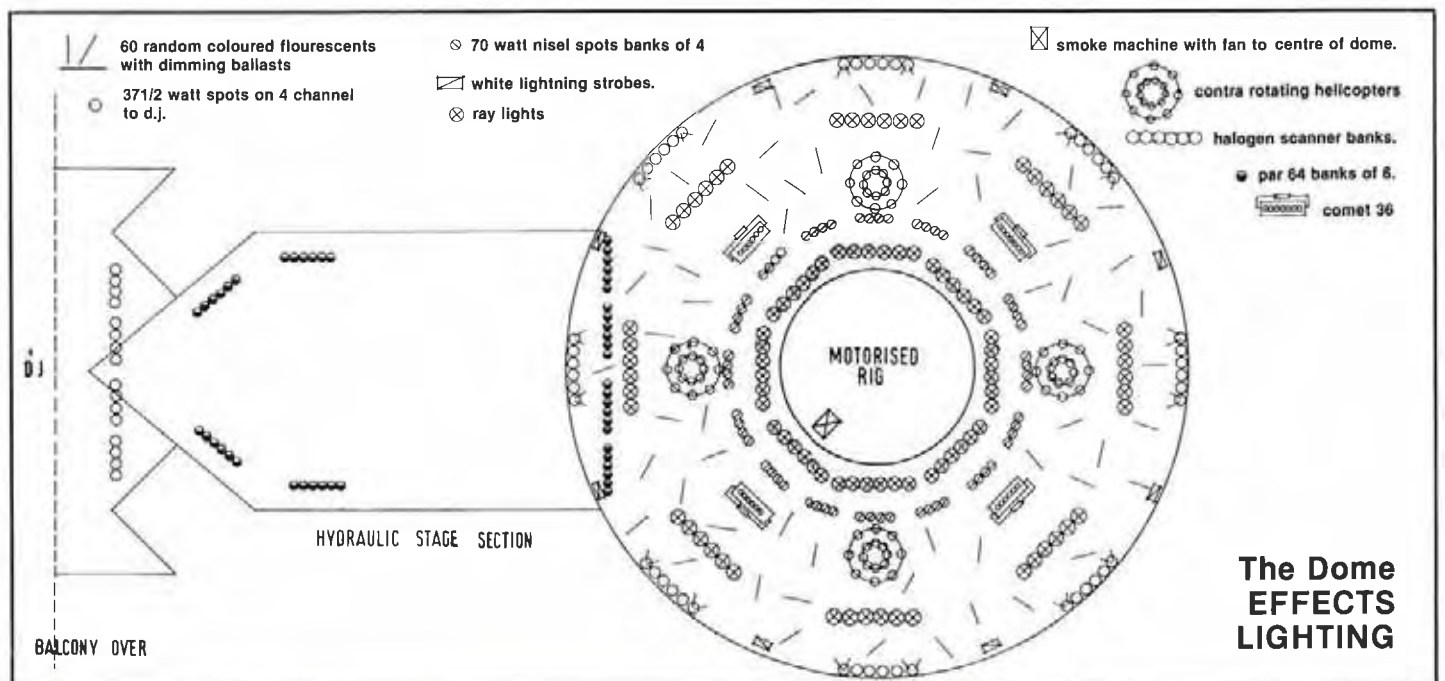
The system has all been built in-house. "We bought all the cable and boxes and I've done the rest—including soldering all the joints!" Mixing console is a Midas 32-8-2.

And there is an equally massive capability on the lighting side. A new 90-way Celco Series 2 memory control has been added to the existing Celco Series 1 30-way board. As Andy Pound said: "We have a theatrical board for a disco environment—a full spec desk at an unbelievable price."

"From a working point of view this venue is the best—both from the technical angle, and

because there's entertainment as well. In fact it's not a true disco—it's a disco complex. It's an 'everything' venue. It's now a fashion industry and traditional disco is no more. We are watching a big company trying out a new idea. Nowhere in the world is there a disco that has a 90-way Celco control and a Midas 32-8-2 mixer." And that's the lighting man talking.

There's no more to say. Apart from telling you a few superlatives about the dome—the one that's given its name to the venue. Made of chromed tubular steel, with variable





The Dome from without.

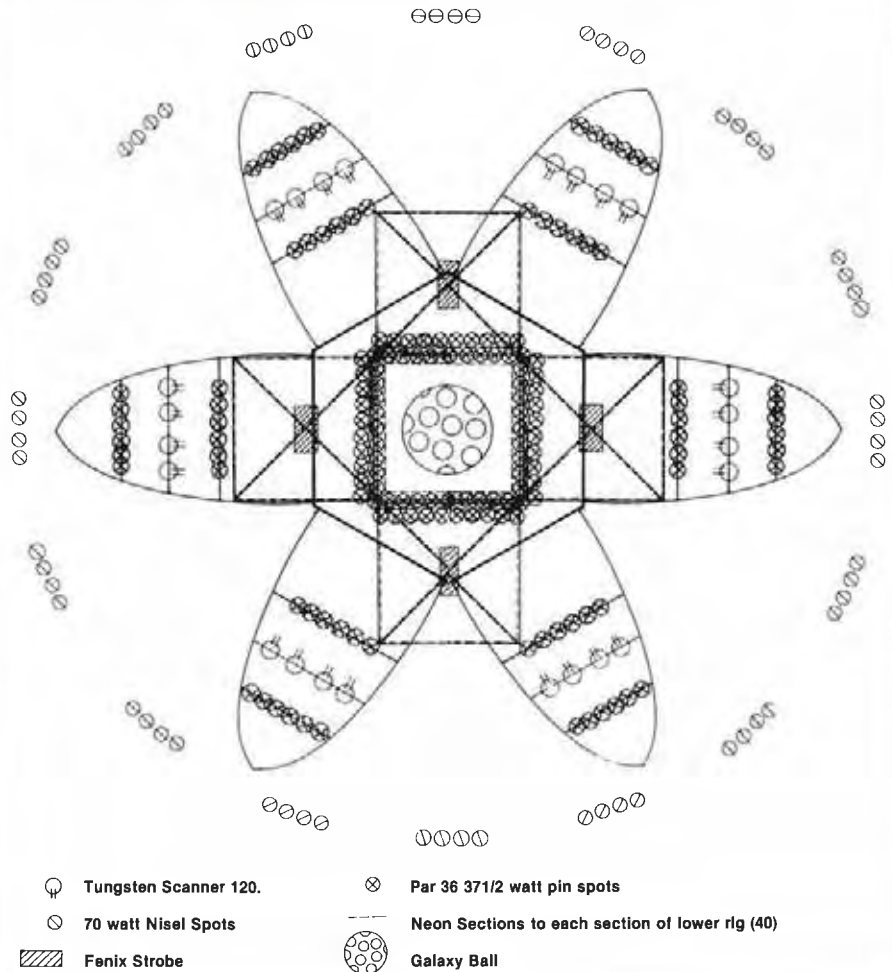


Malcolm Robertson, managing director of Effects Lighting Limited of Leicester who were responsible for the lighting effects associated with the "Dome".

geometry joints (for building reasons it's not quite a half-sphere as a true dome should be), it will take a loading of up to 4 tons of equipment. On it are all the effects, and through it is lowered the centre-piece of effects-work that opens up in petal fashion.

You can see it all in the designs and lists accompanying this article, courtesy Malcolm Robertson of Effects Lighting and First Leisure who commissioned it. And it's bound to be the largest something. "The largest decorated indoor dome in the world," said the press men.

EFFECTS LIGHTING TO MOTORISED RIG





The control room with Andy Pound on lighting at the new 90-way Celco desk and Martin Tasker in the foreground looking after the sound.

And somebody told me they've got seven miles of Tivoli running along every available edge in the building. But please don't take my word for that—I really couldn't be bothered to count.

The Men in Charge

Stage Manager **Martin Tasker** comes from Barnsley in South Yorkshire and his interest in entertainment stemmed from work with the school group

(technical plus a bit of drumming). On leaving school he joined Barnsley Civic Theatre as a trainee entertainments manager but left that post "totally bored" after six months, moving to backstage where he "learned all I know about stagecraft" from the theatre's aged but highly respected stage manager. His interest in sound technology developed from this point.

He then joined Butlins at Skegness as stage manager of their various entertainments venues within the complex, which brought a huge diversification of work and a growing involvement with cabaret-style entertainment.

In 1976 at the age of 19 he applied for the post of technical assistant at the Birmingham Night Out and became the "youngest ever" stage manager shortly after. Encompassed within his work at Birmingham he built in touring experience when he looked after the sound for David Essex's 1981 tour during a holiday break. He has also been responsible for sound at Royal Galas with the Three Degrees.

For the past two years he has been responsible for organising courses for First Leisure to brief venue managers on light and sound (a Nick Tamblyn concept that all managers should have good knowledge, and be able to operate or take over any aspect of running their venue).

Deputy stage manager and lighting engineer **Andy Pound** was born and bred in London and got the entertainment bug at Aston University Birmingham where he was social secretary and responsible for building a disco unit in the Union Hall. He put far too much time and effort in this direction and was sent down after his first year.

Two years, and many different jobs later, he joined Birmingham Night Out as a stage technician with responsibility "towards the lighting side". By 1982 he was full lighting engineer for the venue.

CELCO LONDON-NEW YORK

SERIES 2

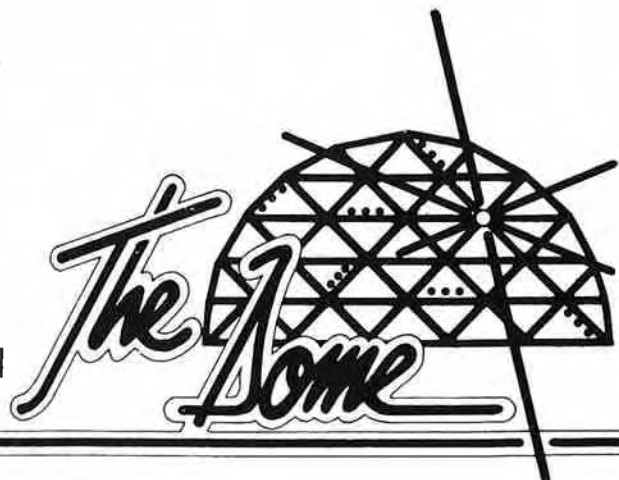
Many thanks to First Leisure Corporation PLC and Effects Lighting (Leicester) Ltd. for specifying a standard Celco 'Series 2' 90-channel lighting board as the main control system for 'The Dome.'

CEREBRUM *Cerebrum Lighting (Sales and Hire) Ltd.,
The Stage and Effects Lighting Centre,
168 Chiltern Drive, Surbiton,
Surrey KT5 8LS, England.
Tel: 01-390 0051/01-390 4841.
Telex: 892337 Celco G.*



LIGHTING

The most Spectacular discotheque in the World



TECHNICAL SPECIFICATIONS

Note: new equipment in **bold type**.

AUDIO:

Sound Engineer: Martin Tasker.

Control Room Equipment:

Midas 32-B-2 Sound Mixing Console; Revox A77 LO Speed Tape Recorder; TEAC Cassette Machine; Technics Turntable; Roland 201 Space Echo.

Main Dance Floor P.A. System:

4 2 × 15 Martin 'S' Bins; 4 2 × 15 Martin 'Philishave' Mid Range; 4 2441 JBL/Martin Horn Units; 4 JBL Bullets (4 per box); **Graphic - Klark Technic Stereo 31 Band EQ**; Cross-Over B.S.S. 4 Way Active Stereo. Power Amps: **RSD Mosfets Bass End**; RSD 800C Mid Range; Turner B302 Top; Turner A300 Tweeters.

Rear Auditorium P.A. System (Flown):

2 2 × 15 Martin Horn Loaded Bins; 2 2 × 12 Martin 'Philishave' Mid Range; 2 2441 JBL/Martin Horn Units; Graphic MXR 31 Bands; Cross-Over B.S.S. 3 Way Active. Power Amps: **RSD Mosfet Bass End**; RSD 800C Mid Range; Turner B302 Top Range.

P.A. System (Flown)—Large Bar Area Front Auditorium:

2 Custom built Martin Side Fill boxes containing: 2 × 15 Bass Units; 1 × 12 Mid Unit; 1 Horn Unit; Graphic MXR 31 Band; Cross-Over 3 Way Active B.S.S.. Power Amps: **RSD Mosfet Bass End**; RSD 800C Mid Range; RSD 800C Top.

Monitor System:

Mixed from AUX Sends Main Desk. 4 LE200 Wedge Monitor Speakers; 2 RSD 800C Power Amps; 1 Formula Sound 19 Band Stereo Graphic EQ. A selection of A.K.G., Shure 57's and 58's, and Beyer Microphones. A selection of Boom and Straight Mic Stands. Rank Strand Communication System. Eight Out Stations. Stage Box containing Mic Inputs plus Splits plus AUX Sends, situated in D.J. Console.

D.J. Console:

3 **SL1200 Technics Decks**; 1 Cassette Machine; 1 Cloud Disco Mixer.

LIGHTING:

Lighting Engineer: Andy Pound.

Stage Lighting:

8 × Bar of six Par 64 1000W (total 48 lamps); 16 × Bar of six Ray Lights (total 96 lamps). These are positioned around the rise and fall stage.

2 × Uni-Spots (1200W HMI) Follow Spots. These are positioned in the roof, centre of the room.

All stage lighting and follow spots are for the use of the performing artistes.

Disco Lighting:

There is a very large disco lighting rig of Par 36 type ef-

fects, neon, strobes, moving effects etc., as well as a large central hydraulic centre piece (see diagrams).

Laser:

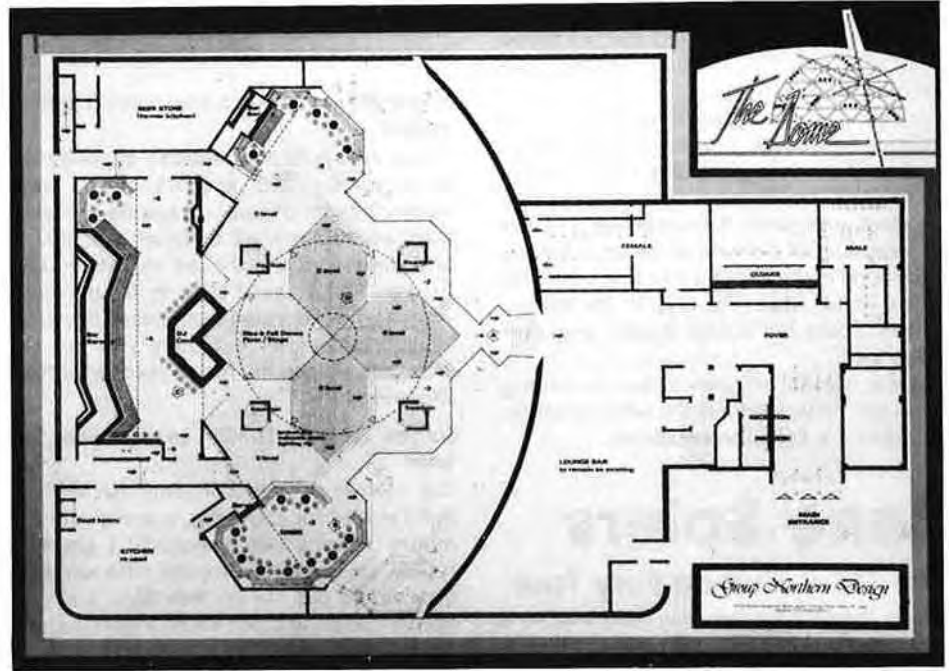
Twin Beam Argon (blue/green) Laser. Positioned in centre of room.

Control Room:

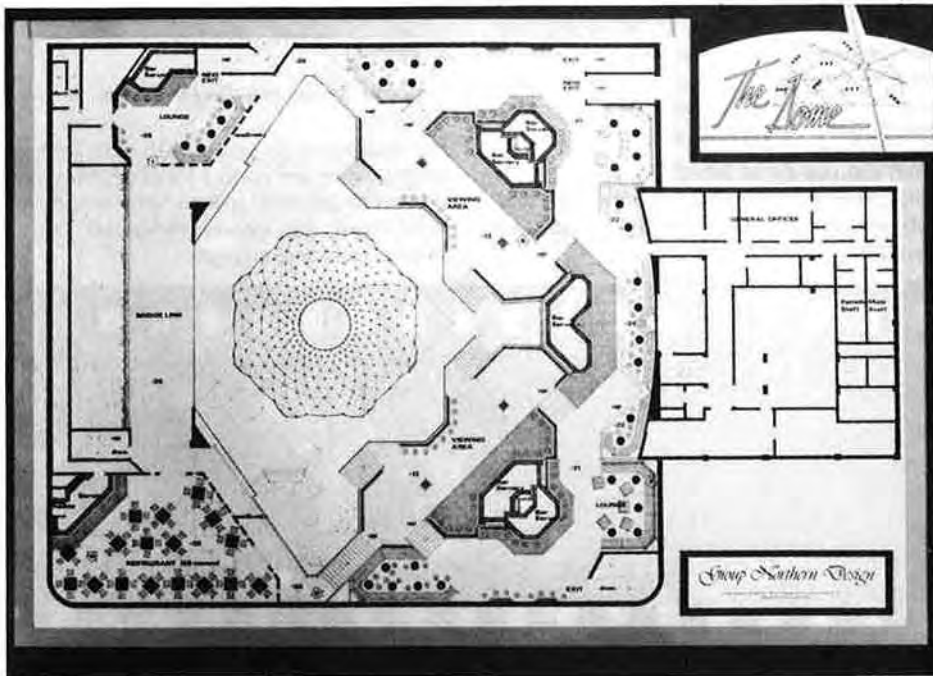
Located at the rear of the room. All lighting in the room is controlled from here.

Lighting Desks:

1 × Celco Series I Gamma 300D (30 way); 2 × **Preset, 40 memories, 4 × chases**; 1 × **Celco Series II (90 way)**; 2 × **Preset, 450 Memories, 8 × chases**; **Controller for Laser**.

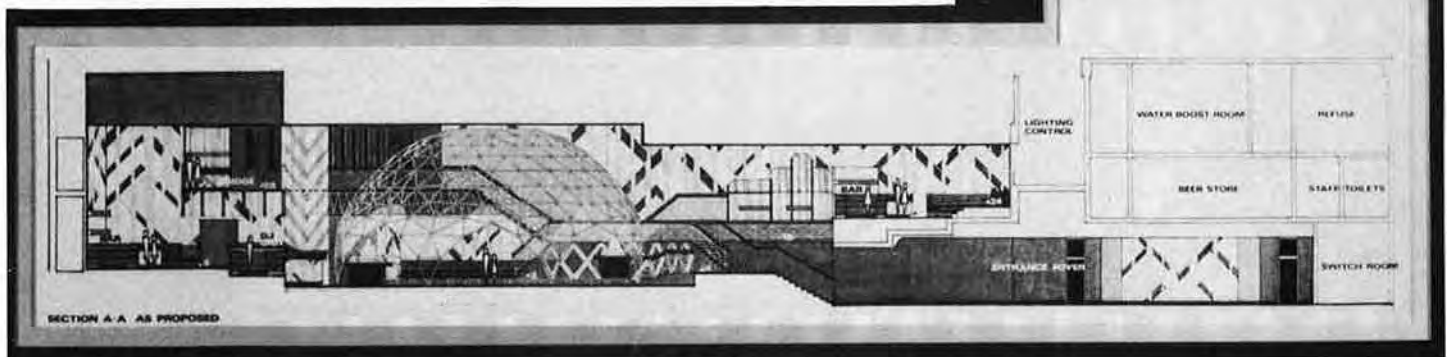


Dance floor level plan.



High level plan showing the Dome in centre.

A section through the Birmingham Dome complex.



ON TOUR

Keith Dale

To kick off the first issue of **L+SI** we have two diverse feature articles. Catriona Forcer takes an in-depth look at lighting designer Jane Spiers, who has recently completed the Gary Numan Fury Tour '85, and we follow with a look at D.G.M.'s 'Last Horizon' from the pen of Martyn Pick.

In between is a selected technical list of lighting equipment currently being used or planned for some up-coming tours, and we are grateful for the help received in compiling these summaries. Our intention is to give an indication of the state of the art in lighting and sound equipment on tour and a guide to who's doing what—not only in the touring concert scene but in legit theatre and other areas too.

In this respect, any information on touring plans will be welcome in the editorial offices of **Lighting + Sound International**.

Jane Spiers

The Gary Numan Fury Tour

People caught in the rush hour traffic look on in amusement at the Gary Numan look-a-likes besieging Hammersmith Odeon. Some of the fans wear the old image of the space age boilersuit, others wear smart black suits with hats carefull tilted at the right angle. But most advertise the latest Gary Numan image of the immaculate white suit and dapper bowtie. The hair is dyed either jet black or peroxide white and, whether they are male or female, the eye make-up is heavy and the lips are painted blue.

As the sound check is finishing Jane Spiers pushes her way through these fans towards the backstage door. It is the second London show of

the Gary Numan Fury Tour UK'85 and the lights are set up and ready from the night before. The 'rock n' roll' business is reputedly a very male-dominated world, but despite this, Jane has succeeded in building herself a reputation as a very good and innovative lighting designer.

When did you become interested in lighting design?

I have always been interested in things like choreography and graphics and I once studied interior design for a couple of years. I then worked as a set designer in a theatre and sometimes this theatre would be used for gigs and I would help to lift the gear. After a while I decided that I would like to be a lighting designer but there was not the work available in my native country of New Zealand.

So you came to London to seek your fortune?

Yes. I wrote to every company that existed, and I waited for about two months with my money running out. Eventually I got two replies, one from a company who said that they would put me on their files, and one from a company called Entec. I gained an interview with them because they had been getting a lot of hassle from a Women's Liberation Movement due to an advert they had placed in a newspaper asking for a 'male only' manager. So, to pacify them, they employed me for a couple of weeks and then found they couldn't get rid of me.

What did you do at Entec?

I did crewing for bands like The Police and Bob Marley. These were large tours and great fun.

What was your first job as a lighting designer?

I was the lighting designer for the Selector for a couple of years which I really enjoyed. I put my whole life into that and when they split up I think that I was probably more upset than the band. I then left the company to go freelance.

What other bands have you designed for since then?

Quite a few—Imagination, Flying Pickets—but mainly Depeche Mode who I've been working for over the last two years.

Do you believe that in this business women have to be twice as good as men to get the same position?

Women have to work twice as hard in the first place to prove themselves capable. Your designs have to be very good as people tend to be very critical but once you've got a foot on the ladder it doesn't matter if you're male or female you just have to be good.

Do you find touring a strain?

No, I love it. It's a really easy life. You don't have to worry about your washing, bills, and things like that. You get fed and you have a roof over your head.

Do you have any 'trade marks' in your designs?

My designs are quite unusual; they are very pretty. There are quite a lot of asymmetrical designs as opposed to symmetrical and I am well know for my candy-striped fans. I always build moving sets.





Jane Spiers.

For the Gary Numan Tour, is there any concept or theme to the lighting design?

The main point of it is the panels—which are actually Gary's design and my lighting design went in and around these panels. Gary has a lot of different ideas. This is the first time that I've done a tour where we've had to sit down every night on rehearsals and go through the song together. We mixed our ideas quite well. I had cues on certain words, which I've never done before, and at first I found that quite difficult.

Do you prefer to be left on your own to do the designs?

The Design on the Depeche Mode tour was left totally to me, which was great, but I have enjoyed working with Gary. He has got some strange ideas. Normally, with lighting, the chorus has a big build up of light and the verse has subdued lighting, but Gary wanted it the other way round. It worked, however, and I've learnt quite a few things. Also, when you do a show you normally pace any special effects, and try to leave surprises for later on, but Gary wanted to show it all in the opening. The whole rig lifts up, the panels move about, and everybody sees what everything does in the first few moments. But certainly it does make a spectacular opening to the show!

Is there a show that you have seen and thought: 'Wow, wish I had done that?'

The Cliff Richard show, about a year ago, was extremely good. He used lasers and all sorts of things that had been used before but he did it so beautifully. I would have liked to have seen the last Genesis show but I didn't. In fact I wish that I had more time to go to shows. I found The Cure show, about three years ago, was very inspiring.

Who would you most like to do a lighting design for?

Kate Bush or anyone who takes a real interest in their lighting like David Bowie. Some of the new bands are good as well because of the enthusiasm they generate. Some of the big bands have already done massive shows and it can be very difficult to impress them.

What are your plans for the future?

When this tour finishes I will start working on the design for the Depeche Mode world tour which starts next year. I'm really looking forward to that.

If Jane Spiers can provide Depeche Mode with a design half as spectacular as the Gary Numan Show then she will still be on a winner. It was stunning.

Catriona Forcer

Gary Numan UK Tour

19 September - 10 October 1985.
D. Lights Design.
Tel: (0223) 834212.
Lighting Design: Jane Spiers.

Equipment on Tour

Mercedes Launch

24 September - 9 October.
Tasco.
Tel: 01-582 3020.
Lighting Design: John Pope.

Lamps:

12 × 4 lamp AC Bars; 35 × 6 lamp Par 64 Bars; 6 × 6 × 16 Leko's; 40 × Short nose Par 64; 30 × Long nose Par 64; 6 × 4 Cell groundrow; 40 × Par 36 Pinstots; 5 × 1k Thorn floods; 4 × 8 Lights; 12 × Raylights; 20 × U.V. tubes; 37 × CCT Sil. 30; 50 × CCT Starlette fresnel; 15 × CCT Minuette fresnel.

Effects:

2 × Patt 252 Effects proj.; 9 × Par 36 helicopters; 5 × Arcline strobe tubes; 6 × Cloud Nine Smoke Machines; 20 × Sparklight Strobes.

Desk (Control Board):

Celco Series 2 - 90 channel.

Dimmers:

3 × 72 way Avo Dimmers.

Spots:

3 × Altman Orbiters; 5 × Telescans.

Diana Ross U.K. Tour

12 September - 29 October 1985.
Tasco.
Tel: 01-582 3020.
Lighting Design: Alan Branton.

Trussing:

30 × 2.4m Telestage; 10 × 1.2m Telestage; + Assorted corner blocks etc.

Lamps:

30 × 4 lamp AC Bars; 16 × 6 lamp Par 64 Bars; 3 × 6 × 16 Leko's; 4 Short nose Par 64; 14 × 4 Cell groundrows; 6 × CCT Sil. 10; 9 × CCT Sil. 40.

Effects:

20 × Colourmax Par 64 units.

Desk (Control Board):

1 Avo Lighting Desk; 1 Kliegel Performer 2.

Dimmers:

2 × 72 way Avo dimmers.

Spots:

2 Pani's.

Sade Tour

4 November - 19 December (U.K. + U.S.A.).
Entec.
Tel: 09328 66777.
Lighting Designer: Mike Cooper.

Trussing:

4 × 10' Thomas 'A' type; 10 × 8' Thomas 'A' type; 2 × 5' Thomas 'A' type; 2 × 19' Slick Truss; 2 × 8' Slick Truss; + Assorted corner blocks.

Lamps:

58 × Par 64; 16 × Par 46 AC; 66 × Raylights; 4 × 4 way Thomas Par 64 units; 6 × 4 cell groundrows; 2 × Sodium Lights; 8 × U.V. tubes; 6 × CCT Minuette Profiles; 5 × Strand T84; 12 × CCT Axial Sil. 15.

Effects:

6 × CCT Semaphore Colourchangers; 4 × Strand 252 effects proj.; 1 × Solar 250; 2 × Tutor 2; 8 × Pancan colourheads.

Trussing:

154 feet of Telestage; 4 × 5m Astralite; 2 × 3m Astralite.

Lamps:

300 James Thomas par 64 and par 46 cans; 6 × 8 light mole fays; 100 raylights; 2 × 2k C.C.T. sils and gobos; 10 × par 36 groundrows; 2 × cosmos balls.

Effects:

32 × 4 × 4' light panels (12 moving as columns); 5 × GIS motors for movement of lighting panels and cosmos balls; 2 × dryice + 2' scissor lifts; Custom built 'NUMAN' sign 40' × 8' using 125 linolite bulbs.

Desk (Control Boards):

90 channel Celco Series 2; 90 channel Avo ultrachase.

Dimmers:

2 × 72 way Avo dimmers; 2 × 48 way Avo dimmers.

Spots:

2 × Pani 40cm lens H.M.L.'S.

Crew:

5 crew including designer.

Desk (Control Board):

1 × Celco Series 2 90 channel; 1 × Celco Series 2 60 channel; 1 × Pancan Memory Control Board.

Dimmers:

2 × 60 way; 1 × 40 way.

Michel Jonasz France

1-22 October 1985.
D. Lights Design.
Lighting Design: James Dann.

Trussing:

128 feet of Telestage; 4 × 5m Astralite.

Lamps:

250 James Thomas par 64 cans; 40 James Thomas par 46 aeros; 24 aircraft lights; 52 raylights.

Desk:

1 × 96 channel Avo desk.

Dimmers:

2 × 72 way Celco dimmers.

Spots:

2 × Altman Orbiters; 1 × Pani 40cm H.M.L.

Crew:

4 including designer.

Misc:

6 × Genie superlifts (for ground support).

Spear of Destiny

23 September - 28 October 1985.
D. Lights Design.
Lighting Design: Mick Pitt.

Trussing:

32' of Telestage.

Lamps:

100 James Thomas cans.

Desk:

1 × Celco Gamma 60 channel.

Dimmers:

4 × Pulsar portapak with custom built desk patch.

Spots:

1 × Pani H.M.I.

Crew:

1 × crew.

Misc:

2 × New wind up towers (12 lamps on each) top lamp height 15 feet; 2 × Genie Superlifts.

Flaming Mussolinis

2 October - 2 November 1985.
D. Lights Design.
Lighting Design: Carl Bernett.

Trussing:

1 × 5m Astralite.

Lamps:

36 James Thomas cans.

Desk:

1 × rockdesk.

Dimmers:

1 × portapak.

Crew:

1 × crew.

Misc:

4 × wind up towers.

Hippodrome on the Road

Reckoned to be Europe's largest mobile disco roadshow, D.G.M.'s entertainment package (based around the discotheque 'Last Horizon') is a direct challenge in terms of quality and sophistication to at least 70 per cent of London's clubs. This is the claim made by the trio of David Carter, Gary Ribeck and Mark Welby who founded the outfit six months ago.

The quality of sound they have achieved, coupled with a light show they fully expect to be "Hippodrome level" within a year, is an exciting fusion and heads up a package that can provide anything from catering and security services through to pyrotechnics.

Having pooled their experience (David ran a club, Mark had worked on sound crews for the likes of U2 and the Eurythmics, Gary ran a small mobile disco) they combined their energies to seek finance and get their ideas on the road. Eventually they raised the necessary £50,000 (on many occasions it seemed easier to raise £½ million than the relatively small sum they were looking for) and now have a show that is already well on the way to repaying its capital loans.

It took a lot of determination to get the sort of attraction they wanted, and up to their own high standards. Their aims was to produce a definitive state of the art product, and many companies they approached for ideas and equipment felt they were being over ambitious. Eventually Avitec, one of Europe's largest club installers, became interested because against the usual run of club installations, D.G.M. were taking the trouble to go for something different.

Normally mobile discos use heavy duty equipment that tends to lack the sophistication of permanent club installations. But what is important about D.G.M., and obviously interested Avitec, was that although they were mobile they were looking to set club standards. It means they have to handle their equipment carefully, and with knowledge and respect.



The 'Last Horizon' disco light and sound show from D.G.M.

From Avitec they have Beta 500 and 800 amps. Other audio equipment includes a Bel BD80 delay unit, a Yamaha R1000 reverb, a Seck 6 into 2 mixing desk, a patchbay, a Teac reel-to-reel, several tape decks, a Dod graphic equaliser and a compact disc player. The speaker system is full-range Bose which is presently being up-rated.

On the lighting side they have available 124 Par 36 pinspots on a 4 channel chase controller. There are 18 sections of arcline and controller, 8 sound scanners, 4 1000w WCR 90 degree scanners, 2 Astrons on Lynx elevators, a 16-head counter rotating helicopter, 4 super strobes and 4 ultra violet lights. To eventually reach that earlier mentioned Hippodrome standard they will be buying in a lot of moving lights and the relevant hydraulics.

A recent major development is the purchase of a prototype 192 channel rock desk from Compulights whom they work closely with, and this will give an enormous range of opportunities (and the pleasant problem of up-grading their lighting system).

Lavish parties and balls are the staple diet of D.G.M., and since their formation they have been booked for numerous up-market private parties for pop stars and media personnel. One of their most recent projects was a charity ball in aid of the Ethiopian appeal. At one stage they hoped to provide the after-show party at Wembley for the Live-Aid stars but were beaten to it by the London club 'Legends'.

Undaunted, they decided to go ahead with their own event, and got the go-ahead from Live-Aid's promoter Harvey Goldsmith.

The resultant "Lynx Ball" (named after the equipment) was held in the De Vere Suite of the Bellhouse Hotel Beaconsfield in late September. Before dinner, guests were entertained by AC5 playing "jazzy cocktail" music under a lighting rig set up by Compulights adjacent to the bar. After dinner the guests were re-admitted for the "Last Horizon" disco and light show and for a laser display by Laser Hire.

The event was successful on all counts. £8000 was raised for the Live Aid appeal and D.G.M. also benefitted with eleven offers of future work. With a multitude of events in the pipeline, including a party for the launch of the Nissan Rally Team, the early-twenties trio of Carter, Ribeck and Welby have good reason to be confident about their future. Another year of gigs in the UK and they feel they will be ready to embark on their projected tour of Europe's major cities.

Martyn Pick.



Arriving to set up for the Lynx Ball.

Note: If your daughter's coming out soon and you can afford a special entertainment package in the price range £500 to £1250 for the full show then contact David Carter at D.G.M.'s office on (0753) 885572.

DISCOM 85 – Paris

La certitude — The certitude?

Discom 85 was held in Hall 2/2 of the Porte de Versailles Palais des Expositions from 20-24 October. The single-hall show spreads itself over 10,000 square metres, and there is enough overall space (and height) to keep the quieter areas quiet, and the darker areas dim enough for light and laser effects to be shown to advantage.

Now six years old, the organisers have a smooth-running show that suits a large range of exhibitors, by no means all light and sound companies. All aspects of the disco and club industry join at Discom to display their wares. From publicity objects to furniture, and from drinks companies to video equipment there were over 350 different trade names (including some British) encompassed across the 150 or so exhibition stands.

In 1985 18,000 visited the Show over its five days and this number included 3,200 from overseas. The target for Discom 85 was 24,000, but we were unable to include an announcement of this year's visitor numbers before going to press.

The overall standard of display did not match up to the presentations shown by British companies at the recent PLASA Light and Sound Show, and it didn't carry the same degree of hype. But it **is** a show that caters for the whole industry, and you **could** find a quiet corner to sit down and talk.

The international flavour was there in the names given to gangways and walkways, for example "Rue E. Presley", "Rue P. Young", "Rue M. Jackson", "Av. J. Hallyday" and so on. But one still came away feeling that Discom 85 was a show by the French for the French, and British manufacturers are best working through their established agent or dealer networks.

John Offord



Part of the stage area for live performance during the Show, supported by Antenne Magazine published by the Magazine de la Discothèque.



Looking across the stand of Suncar-Kamouh to the Ave. G. Montagne.



S.S.F. Laser (France) offers laser writings, special effects, electric signboards, smoke generators, dry ice, and a disco club entertainment show.



Stand 815 of Ambiance Lumiere, a company based in Alfortville, France.



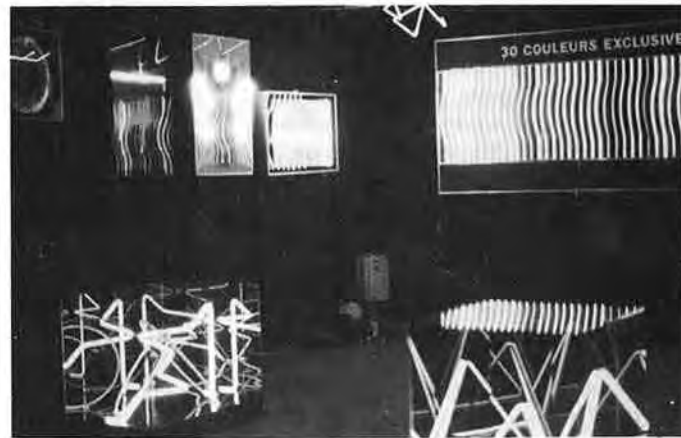
A close-up of equipment on the Strass stand 714.



ATI Assmann of Paris were showing tape recorders, technical and electronic equipment and monitoring and security systems.



Sound equipment and light sets on show on the Seiga (ADC Disco Products UK, Mitsubishi Japan) stand 606.



Neolite of Clichy had a dramatic display of luminous effects.



3M France had on offer everything from magnetic tapes, jingle cassettes and echo chambers to equalisers, jingle machines and microphones.



Effect work in operation on the stand of Delvis, Paris.



J.L.S. Sound of Paris specialise in sound mixing consoles, speaker enclosures, fixture equipment and turntables.



Gérard Cohen of E.S.E.—Eastman Sound Scope (Martin) in discussion with a visitor to the stand 520.

First ABTT North Trade Show

Manchester's Corn Exchange, venue for the first-year ABTT North Trade Show, is a triangular-shaped area and a headache for any exhibition organiser. To overcome the problem the circular touring structure from the City's Royal Exchange Theatre was placed in the middle, and the stands sorted out within it, and around it.

The atmosphere was good, and the venue much lighter and cooler than the shows we've been used to at London's Riverside Studios. Attendance, very honestly stated by organiser Geoff Joyce, was 800 over the period of the Show—somewhat lower than hoped for over the one evening, and two days. He had been hoping for 1200, whilst the ABTT's London show-man Roger Fox reckoned about 1000 would turn up. Included in those who visited the event were 300 theatre professionals with the balance a mix of amateurs, students, television technicians and suppliers.

Joyce reported that response from exhibitors to his after-show walk-round was excellent. Apparently 28 of the 37 exhibitors (the total number he talked to) promised they would be "back next year". Whether there will be a show for them to come back to is another question.

As is usual with events run by "volunteers" from within an organisation, much depends on the willingness of the individuals concerned to take up the challenge on a regular basis. Our guess is that Geoff Joyce (who is a pretty busy man anyway as technical manager of both the Palace Theatre and Opera House) will finally agree to produce a second show in 1986, and to make life a little easier will keep it to the same format, fine-tuning the hours of opening after the experience of this first one. Certainly the ABTT can do with the money now the Arts Council have cut them off, and this ABTT North Trade Show reached its target and put a "nice sum" into the Association's coffers.

On stand were all the usuals and few others beside. Rank Strand and CCT were displaying their wares in opposite corners of the triangle whilst a large Playlight Hire stand had a trio of the current high-flyers with Zero 88's Eclipse, TBA's new range of lanterns, and Pulsar's 'Intelligent Interface'. Main feature of Cerebrum's line-up was the Celco 'Series 2' range of lighting control desks. And it was good to see a wider spread of exhibitor too—particularly the busy stand of British Telecom and their RITA booking system that has grown out of RSC development at Stratford.

And it was also a case of new names and old faces. For the first time we saw Eurolight MSL, the combination of Mike Sweetland's MSL operation and Nick Mobsby's Eurolight. Also Lee Colortran was exhibiting under their new banner for the first time.

Five seminars were arranged concurrent with the exhibition, and the two highlights in attendance terms were the "sound" session (sponsored by MAC), where 120 turned up to hear Philip Clifford (sound engineer at the Royal Exchange Theatre) and the "lighting" (sponsored by Ancient Lights) where 90 tuned in to Francis Reid and Fred Bentham.



ABTT Trade Show North 85 in the Corn Exchange, Manchester, October 10-12.



Keith Dale (Celco) and Colin Whittaker of Cerebrum Lighting demonstrate the Celco "Series 2" 60 channel memory control.



White Light always come up with a smart stand—and in colour it's superb.



Pulsar's Derrick Saunders with the company's "Intelligent Interface" on the Playlight Hire stand (see 'Close-Up' in Equipment News).



Answering questions on the Strand Lighting stand.



Shaun Browne of Futurist Theatrical Hire, Rank Strand main dealers, receives a visitor with the right credentials.



The ABTT 'reception committee' of Sheila Barnes (Palace Theatre), show organiser Geoff Joyce, committee member Jolyon Coombs, and Harold Claber.



MAC Sound and Hire and Sales were sponsors of the seminar session 'Sound Operator and Sound Equipment'.



ABTT London Trade Show organiser Roger Fox with seminar speaker Francis Reid, and Tim Burnham of TBA Technology.



CCT Theatre Lighting quartet of David Manners (director), Martin Hawthorn (area sales representative), Len Druce (UK sales manager) and Steve Southcott (area sales representative).



The TBA Technology 65 Series (see Equipment News) on show on the Playlight Hire Stand.

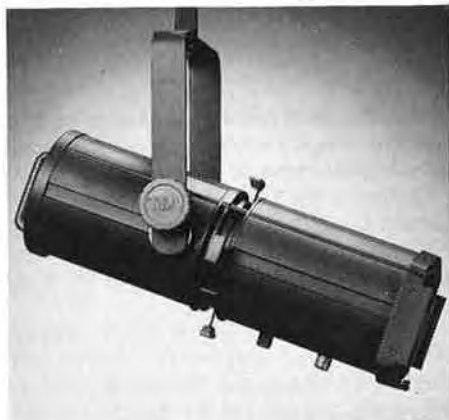


Roger Straker of Theatre Projects Services with Graham Bowen and Mike Sweetland of the newly-formed Eurolight MSL operation.

“Science for Art’s Sake” TBA’s new 65 Series

TBA Technology have just launched their new 65 Series range, which comprises a zoom profile, a fresnel, and a pebble convex luminaire. The company’s new production facility is now operational, and production of the new lanterns including the now famous “Magic Lantern” launched at the ABTT Trade Show in May began in October.

The Z/65 Zoom profile is billed by TBA as “the classiest 650 watt Zoom on the market”, with coated, three-lens condenser optics, spring-tensioned gate, four stainless steel shutters and spring-loaded colour frame retention. Beam angle range is 12 to 30 degrees; dimensions 555L x 213w x 160h (mm); weight 5.23Kg.



TBA Z/65 Zoom Profile.

The F/65 fresnel spotlight has been engineered for a long, trouble-free life, and a specially-designed fresnel lens maximises light transmission, while giving outstanding smoothness of



TBA F/65 Fresnel.

field. TBA Barndoors can be used for beam shaping. Beam angle range-16 to 65 degrees; dimensions 291L x 213w x 160h (mm); weight 3.55 Kg.



TBA P/65 Pebble Convex.

The P/65 pebble convex fills the gap between fresnel profile, with a concentrated, striation-free beam, which is slightly harder edged than the fresnel, and can also be shaped with a TBA barn-door. Beam angle range 10 to 42 degrees; dimensions 291L x 213w x 160h (mm); weight 3.65Kg.

The new series uses many of the same mechanical components as TBA’s innovative low-voltage luminaires, and a full range of accessories is available.

For full details and UK dealer list contact TBA Technology, 31 Corsica Street, London N5 1JT tel: 01-359 3599. In the US contact TBA Technology, PO Box 302, Walnut Creek, CA 94596 tel: (415) 932 8134.

The Travelling Performer

John Hornby Skewes of Leeds have announced additions to their range of Audio-Technica microphones.



The Audia-Technica PRO22.

Highlight is the PRO22, a dual (Hi-Lo) impedance microphone which will be very useful for the travelling performer. This unidirectional dynamic vocal mic. has a detachable 13’ shielded single conductor cable fitted with XLRM connector and standard ¼” jack plug.

It features oversize ball-type multistage wind-screen and the attractive black casing as utilised

on other microphones in the PRO Series range.

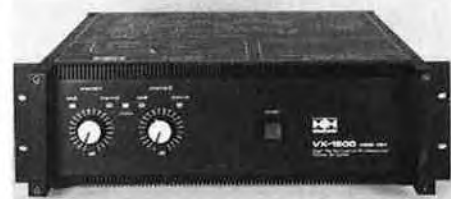
Full details from John Hornby Skewes & Co. Ltd., Salem House, Garforth, Leeds, LS25 1PX, telephone (0532) 865381.

HH announce “all new” VX Series

After nearly 12 months Research and Development work, H.H. Electronics Limited have just announced a new and exciting range of second generation MosFet power amplifiers.

The all new VX series comes in a wide range of power ratings offering seven different output levels, from the 1u high VX-150 through to the 3u VX-1200 (the massive 610 watt per channel VX-1200 takes up only 3 units of rack space!).

For applications and installations where silent operation is required, the first three models in the new series (VX-150 80w x 80w, VX200 100w x 105w and VX300 155w x 155w) are all convection cooled.



The VX-1200 amplifier is available this month from H.H. Electronics.



Rear view of the VX-1200.

The rest of the new series are all two-speed and fan cooled, offering almost inaudible low speed operation on turn-on and highly efficient, front intake rear exhaust, high speed operation. In addition to the well known H.H. ‘quality of build’, other features and facilities of note include, according to model: optional V.C.A. control; external selection of ‘unbalanced’, ‘electronic balanced’, and ‘transformer balanced’ inputs; D.C. load protection; and comprehensive range of input and output connector options.



The VX-150 comes “on-line” in December this year.

The VX-1200 is available this month, and the VX-150 follows in December.

For full details contact H.H. Electronics Ltd., Viking Way, Bar Hill, Cambridge CB3 8EL telephone (0954) 81140.

ILP and the "Missing Link"

In August 1983 ILP Electronics began research work to fill the gap in the speaker market by designing a 12 inch loudspeaker to do the job traditionally left to the 15" and 18" sizes. Nicknamed the "Missing Link" their new 12" bass speaker was launched at the PLASA Light and Sound Show in September.

The company recently announced that advance sales for the speaker reached nearly £200,000, and it will be available in production quantities from January 1st 1986.



12" Bass Speaker—£200,000 advance sales notched up within four weeks.

Launched jointly with the speaker was ILP's new 80 watt Lead Combo—a specialised, single instrument combo which means the entire front panel is devoted to equalisation and effects. It came on to the market as from October 1st.



ILP Electronics Lead Combo.

A further piece of equipment on show at Novotel was their 2Kw stereo slave, although still in prototype form. ILP told *L+S* that R & D work still has to be carried out, and the product will be officially launched at the Frankfurt Music Fair next February.



ILP Unicase Slaves.

For full details contact ILP Electronics Ltd., Graham Bell House, Roper Close, Canterbury, Kent CT2 7EP tel: (0227) 454778.

Close Up



Pulsar Get It Right

It was only a matter of time before someone produced a program which would enable an off-the-shelf microcomputer to become a stage lighting control system.

As with many other exciting developments in stage lighting recently, this has come not from the big-name boys—but from one of the industry's leading smaller high technology companies—PULSAR.

In a sense of course their "Intelligent Interface" is not the first. Many such programs exist in the U.S. for the Apple IIe and our own early biggies were all based on standard computer hardware. However with all of these some kind of dedicated keyboard was required and the absence of this is where Pulsar will score.

The "Intelligent Interface" comprises a rack mounting interface box and three-way master fader unit. Currently the program is based on the BBC micro but it will talk to other systems once the software is available. Since the BBC is a best seller this appears to be a sound start; especially for the educational market.

So if you own a BBC then £495 plus vat (retail) will buy you a 36 channel memory desk. Beat that! And larger systems will follow. If you don't own a BBC then the total system purchase comes to £1150 retail excluding VAT, but don't forget that part of your system comprises a standard micro so when it isn't controlling stage lighting it can write the scripts and do the accounts.

And already Pulsar report that one disco owner is doing just that.

O.K. but does it work?

"Intelligent Interface" could have fallen flat on its face if the gain of memory was only achievable through a cockpit drill second to that on Concorde. But there are fewer buttons to press for each function than on many dedicated systems and since the format is standard QWERTY then we all know where they are. Furthermore the operational logic

isn't a thousand miles from that in current practice. This is a refreshing change by comparison with some other systems launched.

Of course the only way to test a control system is to plot a show on one—something I have not yet been able to arrange. However the showroom demonstration satisfied my curiosity.

At first glance some functions appear slower than on conventional desks—channels cannot be selected numerically by tapping in the number but by moving the cursor—faster in fact than you think but obviously slower for 72 channels than for 36. Extra cues can be inserted anywhere without limitation because all subsequent memories jump up one number to make room each time although this could become a drawback in straight theatre if the stage manager's cue number happens also to be the memory number. However there is a facility to name each cue or memory so the board doesn't need to be worked purely by numbers. Circuits can also be named and this is especially helpful on specials and one-night-stands.

I liked the bar-graph display of the channel levels—this moves as the cue moves—because it provides the operator/designer with an instant visual readout of the balance—individual circuit levels are also displayed on an 100% scale.

My only criticism so far is that auto or timed fades should be started by push button not by a slight movement of the adjacent master fader (which then has to be reset before another function can be selected) but I have to say that Pulsar answered all my other criticisms fairly and appeared ready to listen to more so maybe this will be dealt with too.

So the memory revolution continues and the "Intelligent Interface" promises to go where no memory has ever gone before. Well done Pulsar.

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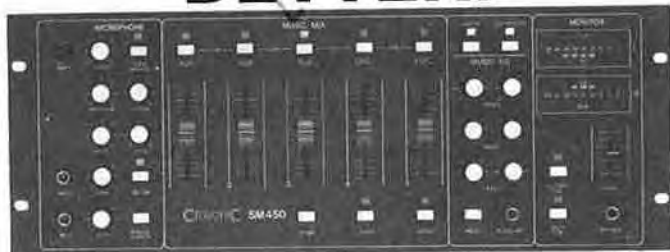


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<p>SP MKII</p>  <p>SP1 MKII: A vast improvement on the previous design, the SP1 MKII incorporates a 15" driver along with two horns as a larger enclosure, resulting in an exceptional bass response for a cabinet of this size — 150W @ 8 ohms. Size: WHD 43 x 24 x 40 cm</p>	<p>SP1</p>  <p>SP1: A small cabinet containing one 12" main driver and piezo horn — 100W into 8 ohms. Dimensions: WHD 37 x 31 x 30 cm</p>	<p>SP3</p>  <p>SP3: One of the smaller cabinets offering exceptionally high output for the size of cabinet. It incorporates 12" studio driver and high efficiency bullet tweeter, one of the best selling cabinets in the Hendy range — 200W, 8 ohms. Dimensions: WHD 38 x 23 x 33 cm</p>
<p>SP4</p>  <p>SP4: This is a scaled up version of the SP1 using a 15" studio driver, producing a relative increase in bass performance — 200W, 8 ohms. Dimensions: 43 x 27 x 40 cm</p>	<p>SP5</p>  <p>SP5: The latest addition to the Hendy Speaker range, the SP5 utilises a 15" studio driver along with a high efficiency bullet tweeter and 12" mid range driver mounted in a separate integral chamber. Each component is fed through a three way passive crossover mounted inside the cabinet — 200W @ 8 ohms. Dimensions: WHD 49 x 31 x 40 cm.</p>	<p>AX1</p>  <p>AX1: An add-on horn cabinet containing two piezo horns — 200W. Dimensions: WHD 48 x 18 x 30 cm</p> <p>AX2</p>  <p>AX2: An add-on horn cabinet containing a very efficient single moving coil horn — 100W. Dimensions: WHD 48 x 18 x 30 cm</p> <p><small>Both the AX1 and AX2 add-on horn cabinets can be added to any system to increase the overall treble response.</small></p>

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Friday 13th Award Day for Soundcraft

When a company receives its second Queen's Award in a short history of only 12 years it can hardly be put down to just good luck, so Soundcraft Electronics had no qualms in choosing Friday 13th September to receive their second Queen's Award for Export Achievement.

The Award was presented to Phil Dudderidge and Graham Blyth, co-founders of the company, by the Lord Lieutenant of Hertfordshire, Major General Sir George Burns KCVO CB DSO MC, representing Her Majesty the Queen. The presentation, which took place at their new manufacturing facility, was attended by an audience of over 200 members of staff, comprising the ever increasing work forces of both the Magnetics and Electronics divisions.

New TSE Intergrated Series from Turbosound

Just announced, the new TSE intergrated series of sound reinforcement enclosures from Turbosound initially comprises 3 separate units. They can be used separately, or the TurboPoleKit[®] is available to mount the TSE-111 ("one-eleven") at the optimum height above either of the Bass units.

The low frequency capabilities (TSE-118/218) and excellent transient response (all units) make these enclosures particularly good at projecting high SLP levels with considerable impact in professional applications. They will be suitable for live sound reinforcement, whether in concert halls, top-level discotheque installations and mobiles. Like their companions in the Turbosound TMS series, they are phase and amplitude aligned units.

Characteristics are high efficiency and phase-coherency, producing a controlled, cohesive sound with excellent dynamics and transient response, while the "high-Q" design produces a tight beam of sound, making them ideal for multiple-unit arrays. "These features produce the control, projection and accuracy that make the TSE and TMS series unique," say Turbosound.

The rugged enclosures are made from 5/8" birch ply for long-term durability, and their low weight and compact size mean they are very easy to handle. Equally, they are ideal for flying, and to make the most of this capability, each TSE-111 is designed to make the rigging of a flown system as straightforward as possible.

An optional and all new specially-designed flying system is available which bolts onto the cabinet and allows the enclosure to be flown at any angle. By adjusting the rigging system's tensions it's a simple matter to achieve the correct dispersion angle between the units. The engineer can ar-

range the system to get as close to the point-source ideal as possible with minimal rigging problems.

Specifications:

TSE-11 is a 2 way line array design enclosure containing a 10" midrange driver made to own specification and loaded with a patented TurboMid device, and a modified 1" high frequency driver loaded with a proprietary flare. It is designed to be used with an electronic crossover set at 250 Hz.

Dimensions: 498mm x 450mm x 480mm.

Weight: 61.73lbs (28Kg).

Crossover point: 250 Hz.

Frequency response: 250-17,000 Hz +/- 3dB.

Dispersion: 70°H x 60°V at -6dB points.

Sensitivity: 106dB 1 watt/1 meter (average); 109dB 1 watt/1 meter (peak).

Maximum SPL: 126dB (Continuous); 135dB (peak).

Power handling: 150 Watts RMS, 300 Watts Program; 16 ohms.

TSE-118 is a Bass enclosure fitted with a custom-designed 18" bass driver loaded with a patented TurboBass device.

Dimensions: 683mm x 500mm x 717mm.

Weight: 88.74lbs (40.25Kg).

Frequency response: 45-350 Hz.

Sensitivity: 104dB 1 watt/1 meter (average); 107dB 1 watt/1 meter (peak).

Power handling: 300 Watts RMS, 600 Watts Program; 8 ohms.

TSE-218 is a Bass enclosure fitted with two custom-designed 18" bass drivers both loaded with a patented TurboBass device.

Dimensions: 683mm x 965mm x 717mm.

Weight: 165lbs (80Kg).

Frequency response: 45-350 Hz.

Sensitivity: 107dB 1 watt/1 meter (average); 110dB 1 watt/1 meter (peak).

Power handling: 600 Watts RMS, 1200 Watts Program; 4 ohms.

Full details from Turbosound Sales Limited, 202/208 New North Road, London N1 telephone 01-226 0099.

Strand Lighting's New Effects Projector

Strand's new Cadenza EP 2000W Effects Projector is the successor to their now obsolete Patt.252.

As the name implies the Cadenza EP follows the styling appearance of the Cadenza 2000W series spotlights, and in fact the main housing closely resembles the Cadenza Fresnel. Measuring 400 x 415 x 370mm and weighing 14.5kg (excluding effects disc) it is smaller and lighter in weight and, more importantly, the light output is approximately twice the intensity of the 252 it replaces. Moreover, its smaller size makes it more suited to the cramped conditions of a circle front box.

Thunder and Fleecy Clouds, Snow and Flames are but a few of the effects that are available in Strand's comprehensive range of disc type Moving Effects Attachments. Of more than passing interest to existing users of Strand's moving effects is that all accessories currently listed for the Pattern 252 will fit the Cadenza EP.



Cadenza EP 2000W Effects Projector fitted with Moving Effects Attachment and Objective Lens.

The introduction of the Cadenza EP closes the one remaining gap in Strand's extensive range of Profile, Prism Convex and Fresnel spotlights—a new series that began with Minim, Prelude and Harmony in the Autumn of 1981, subsequently extended by Nocturne and Coda floodlights, 2000W Cadenza's and Solo followspots.

Full details from Strand Lighting, PO Box 51, Great West Road, Brentford, Middlesex TW8 9HR telephone 01-568 9222.

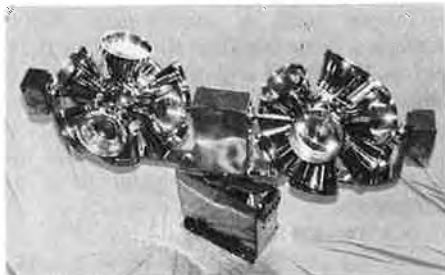
... plus Luminaire Stencil

A stencil is now available from Strand Lighting which covers their current range of luminaires including the new Cadenza EP Effects Projector announced above. It should prove very useful to lighting designers, planners and anyone else involved in drawing up a lighting rig for a stage production.

Manufactured from a flexible green plastic it measures 8 1/2" x 6" and presents a plan view to a scale of 1:25. It is supplied in a plastic wallet and is obtainable only from Strand dealers throughout the U.K.

New from JiveLight

Three product groups were launched at the PLASA Show by JiveLight Ltd. Rollerballs with reflectors are available in single or double format, with or without controllers, and in black or chrome finish. The single unit houses 10 lamps with two rotations while the double has 20 with three rotations. When used with controller the single unit has varispeed 0-60 rpm and horizontal effect 20 rpm. The double unit tumble effect is the same range with each ball contrarotating. Prices range from £710 to £1588.



JiveLight Double Rollerball.

The Rotax G-90 series of lamps, the 6/30 Par36 4515 and the 24v/100w have 4 independent motors, 1 lamp circuit, and heads are placed in different positions to drive beams in any direction. Price range is £149 to £412.

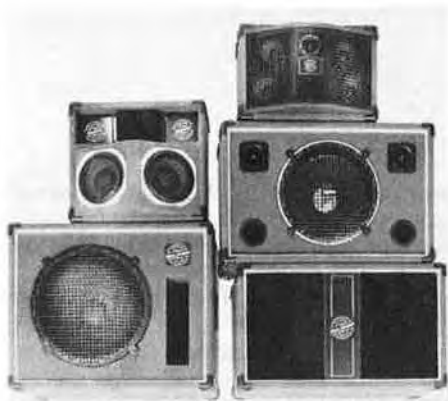


Rotax 6-90.

Final item in the trio is the T-100 Pinpoint with reflector housing a 24v 100w Osram lamp with 2,000 hours life, price £48 in black, £53 in chrome.

For full details contact JiveLight, 16-18 Greyhound Road, London W6 8NX tel: 01-381 0868.

New Monitor Speaker Range from Squire's



Shown above is the new Squire Monitor Range. Bass Stations 500 and 300 (Bottom), Monitor 200 and 250 (Middle) and Monitor 100 (Top right).

Successfully launched at this year's PLASA Light and Sound Show at the Novotel in Hammersmith was Squire Light and Sound's new Monitor range of Speakers.

Heading the new range is the Monitor 250 which features a carpet covered cabinet with special porting for extended bass, together with a 15" main driver and 2 bullet horns for optimum treble response. The Monitor 250 also features special fixing hoops and is priced at £275 + VAT.

The full range is on demonstration at Squire's Showrooms in London, Birmingham, Manchester and Glasgow and further information/literature is available by writing to Squire Light and Sound Ltd., 176 Junction Road, London N19 5QQ.

Luton Sound & Lighting Product Guide 1985/86

The recent PLASA Exhibition at Novotel Hammersmith saw the release of the new Luton Sound & Lighting Product Guide for 1985/86. This publication, probably the most comprehensive in

the industry, contains their full range of products available not only to the retail customers but also to the trade through Hendy Distribution. The catalogue includes products from most leading manufacturers, will full text and copious illustrations. There is also a full company profile and detailed information on their range of services available for both UK and overseas customers.



Luton Sound & Lighting 1985/86 Product Guide.

If you would like a copy see their advertisement on page 55 or contact Luton Sound & Lighting Ltd. Sales Department on 0582 411733 (5 lines).

New CCT Floodlight (and more)

CCT Theatre Lighting have recently introduced a new asymmetrical 1000/1250w floodlight available either in single or four "square" or four "in line" configurations. Over 200 have been installed in the Richmond Ice Rink, and several other projects are in progress. A symmetrical version will be introduced in the near future.

By popular demand CCT are also introducing a new Zoom Profile Spotlight in the Minuette range. This is to be the Z0603—a wide angle version of the Z0602 with a beam angle ratio of 30/50 degrees. Full details will be announced shortly. This will mean there will be three Minuette profiles rated at 650w: the Z0601TT—a non-zoom but with 3 lens variants 26-39-47 degrees; the Z0602 17/35 degree zoom; and the new Z0603 version.



ZOC96 asymmetric flood 1000W/1250W—also available 4 in line/4 square.

Finally, CCT's Minuette range has spawned several new luminaires specifically for architectural applications. The new range is called "Lightline" and comes in various colours.

Full details from CCT Theatre Lighting Ltd., Windsor House, Willow Lane, Mitcham, Surrey CR4 4NA tel: 01-640 3366.

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SHOW PAGE *with PLASA News*

The Plasa Missions

Up to now the Professional Sound and Lighting Association has been known principally for the trade equipment show which it puts on each year. However, Plasa offers its members a variety of other services, and I would particularly like to draw your attention in this first issue of **Lighting and Sound International** to our export-related services, particularly as at the time of writing I am about to depart to Australia and New Zealand on a joint Plasa/BPEG trade mission.

PLASA can help existing or new exporters in several ways: by providing support for subsidised overseas sales trips (trade missions); overseas exhibitions (joint ventures); and even direct mail using the **L+SI** overseas mailing list (800 strong at the time we go to press with this first issue).

The Australian missions will be our first, and whilst only four or five companies are participating, I am sure that since there are at least two major distributors involved, a number of other companies will benefit. The only way to go to Australia (they tell me) is right round the world, so everyone is going via USA or Canada to Australia and coming back via the Far East—a market that I'm sure you all know is currently very good for British professional lighting and sound products. Incidentally, the Department of Trade will be paying nearly half the total expenses of each participant.

The other aspect of Plasa activities that I would draw your attention to are its overseas joint ventures. Our next is to the Music Fair in Frankfurt in February 1986. For this event we have even been able to arrange extra space this year to accommodate the late bookings received at the Plasa show. It has long been a bone of contention between the Department of Trade and trade

associations that the booking and deposit for such joint ventures has to be made nearly nine months ahead, but regrettably it would appear there is little we can do about this.

Back in the UK we will again be holding the **1986 Light and Sound Show** in Novotel in Hammersmith. I am intrigued by comments both in the press and from within the industry that this Show should aim for a much wider market. The question has been asked: "Is the Light and Sound Show 1986 an equipment exhibition, or it is an exhibition of all items required to furnish a theatre/club/discotheque?" In my view we set out to be

an equipment show, and we have achieved this 'par excellence'.

But we must move on. If our members and exhibitors want a wider-based show, perhaps a cross between the existing Light and Sound Show and the Pub Club and Leisure Show, would they please let the committee, and especially me, know their feelings. Plasa needs to both lead our industry and be responsive to its members' requirements.

I look forward to hearing from you!

Peter Brooks,
Chairman, PLASA.

Exhibition Diary

Entertainment 86

February 4-6, 1986.

Bournemouth International Centre.
John Offord Publications/Exhibitions,
12 The Avenue, Eastbourne,
E. Sussex BN21 3YA.
Telephone: (0323) 645871.

Frankfurt Music Fair

February 15-19, 1986.

Frankfurt Fair Centre **Frankfurt**, West Germany.
UK Representatives: Collins and Endres,
18 Golden Square,
London W1R 3AG.
Telephone: 01-734 0543.

ABTT Trade Show

March 20-22, 1986.

Riverside Studios, **London**.
Association of British Theatre Technicians,
4 Great Pulteney Street,
London W1R 3DF.
Telephone: 01-434 3901.

USITT

March 19-21, 1986.

The Hyatt, **Oakland**, California.
David Hand, c/o The Stage Engineering
International, Box 2699,
Colorado Springs,
CO 80901 USA.

Pub, Club and Leisure Show

April 8-10, 1986.

Olympia 2, **London**.
Angex Ltd., Europa House,
St. Matthew Street,
London SW1P 2JT.
Telephone: 01-222 9341.

Audio Visual 86

April 14-17, 1986.

Wembley Conference Centre, **London**.
EMAP/MaLaren Exhibitions Ltd.
PO Box 138, Token House,
79-81 High Street,
Croydon CR9 3SS.
Telephone: 01-688 7788.

SIB Rimini

May 6-9, 1986.

Rimini, Italy.
Ente Autonomo Fiera Di Rimini,
PO Box 300, 47037 Rimini, Italy.
Telephone: 0541/773553.

UK enquiries: Disco & Club Trade International.
Telephone: 01-278 3591.

Lighting World 4

May 11-13, 1986.

Los Angeles, California.
Robert Weissman, National Expositions Company
Inc., 14 West 40 Street,
New York NY10018 USA.

Showtech 86

May 13-15, 1986.

ICC - **Berlin**.
UK enquiries: Spectrum Communications Ltd.,
183-185 Askew Road,
London W12 9AX.
Telephone: 01-749 3061.

Scottish Pub, Club and Leisure Show

June 3-5, 1986.

The Scottish Conference and Exhibition Centre,
Glasgow.
Ian Macfarlane Exhibitions Ltd.,
15 Elm Grove, Didsbury,
Manchester M20 0RL.
Telephone: 061-434 5300/0050.

NAMM Exposition

June 14-17, 1986.

McCormick Place, **Chicago**, USA.
Larry R. Linkin, 500 N. Michigan Avenue,
Chicago IL 60611, USA.

PLASA Light and Sound Show

August 31 - September 3, 1986.

Novotel, **London**.
Enquiries: (exhibition bookings) David Street.
Telephone: 01-994 6477.
Enquiries: (general) PLASA secretariat, c/o Roger
Saunders, 1 West Ruislip Station, Ruislip,
Middlesex.
Telephone: (08956) 34515.



Peter Brooks.

Sonimag 86

September 15-21, 1986.

Barcelona, Spain.

Feria De Barcelona, Avda. Reina M.^a Cristina,
08004 Barcelona.

Telephone: (93) 223 31 01.

Photokina

September 3-9, 1986.

Cologne, West Germany.

UK Representative: Tony Pittman.

12/13 Suffolk Street, London SW1Y 4HG.

Telephone: 01-930 7251.

National Club, Pub, Hotel + Catering Show

October 7-9, 1986.

G-Mex, Manchester.

Ian Macfarlane Exhibitions Ltd., 15 Elm Grove,
Didsbury, Manchester M20 0RL.

Telephone: 061-434 5300/0050.

VISITOR LISTS

Computer print-outs in list or label format are available covering all visitors to the recent PLASA LIGHT AND SOUND SHOW.

For full details contact Roger Saunders, General Secretary,
1 West Ruislip Station, Ruislip,
Middlesex HA4 7DW.
Telephone: 08956 34515.
Telex: 884389 (TMT Co).

PLASA

LIGHT &
SOUND
SHOW

**31st August -
3rd September
1986**

**NOVOTEL
Hammersmith
London**

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Note: Exhibition layout will change and the entrance to the show will be on the **ground** floor.

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Non-members —	Shell Scheme	£102.00m ²

For full details contact DAVID STREET
10 Barley Mow Passage, Chiswick, London W4 4PH.
Telephone: 01-994 6477 Telex: 8811418.



All action and interest at the PLASA Light and Sound Show 85 at Novotel Hammersmith.

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Telex: 892337 CELCO G.

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CLOUD ELECTRONICS LIMITED

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Contact: R. Millington, Director.

Cloud Electronics produce a range of high quality sound reinforcement equipment for the discotheque industry; consoles, mixers, amplifiers, loudspeakers, etc.

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Contact: Mick McManus, Partner; Rodney Clark, Sales Manager.

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Tel: 01-354 2254.

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MODE ELECTRONICS LIMITED

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Tel: (0920) 2121.

Contact: Richard Stewart, Technical Director; John Bradbrook, Commercial Manager. Manufacturers of discotheque lighting control equipment, dimmers and effects.

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Contact: Iain Price-Smith, Managing Director. Designers and manufacturers of electronic lighting control equipment. Trade

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Contact: Ray Wilkinson, Partner.

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Contact: Derrick Saunders, Director; Ken Sewell, Director.

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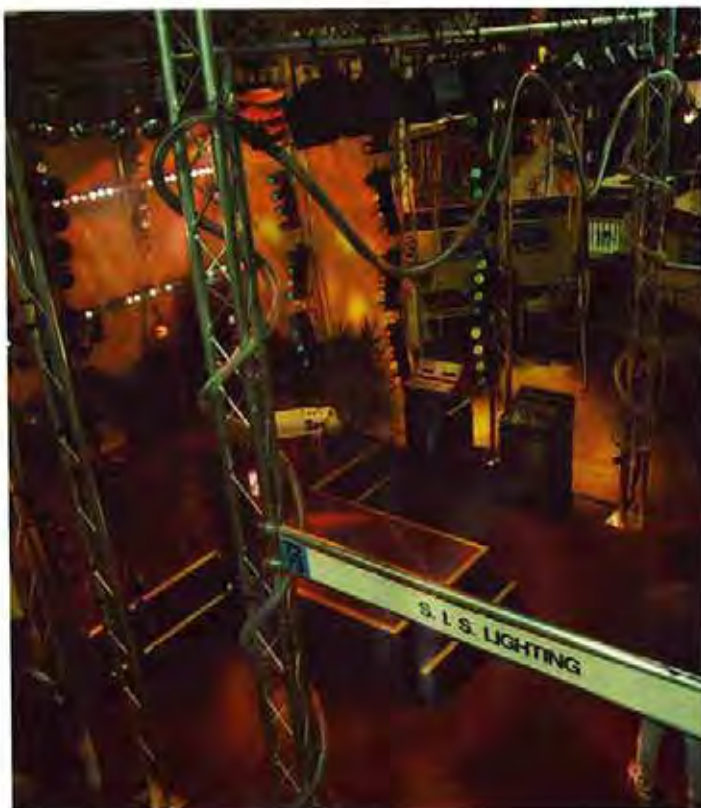
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or write to Lighting + Sound International,
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If you are involved with any aspect of entertainment and presentation, and have responsibility for selection, purchase or hire of lighting and/or sound equipment, please send us your brochure, letterhead or business card and we will ensure you receive a complimentary copy of this magazine in the future.

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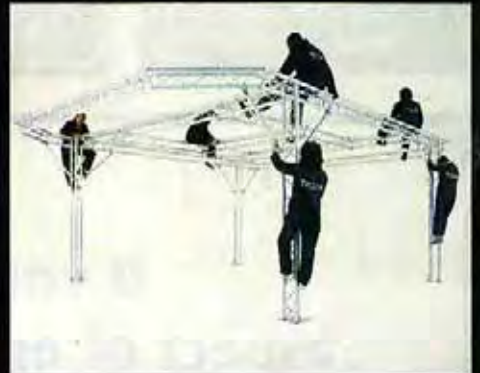
12 The Avenue, Eastbourne, East Sussex BN21 3YA.
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Optikinetics Limited 38 Cromwell Road Luton LU3 1DN England
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