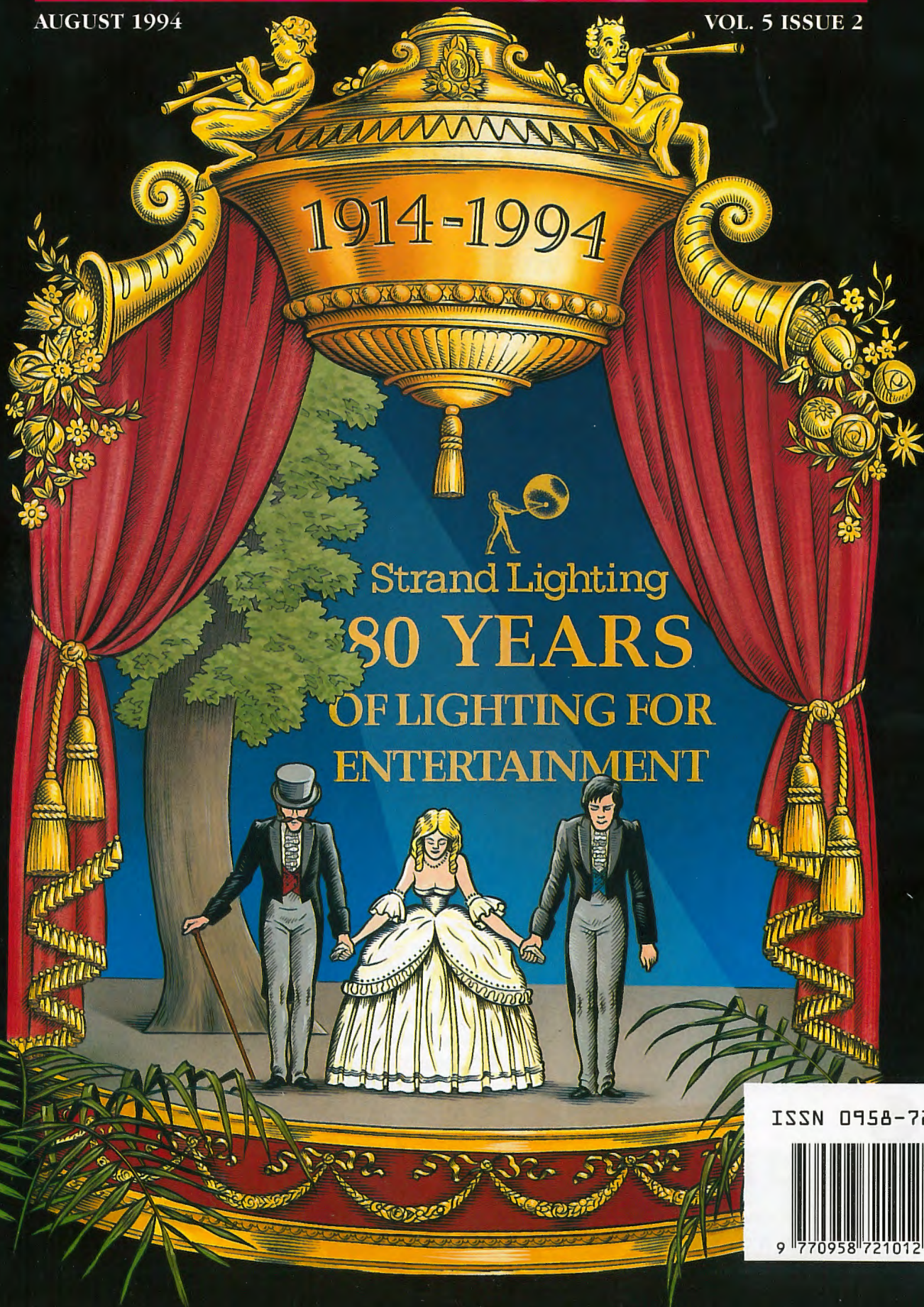


LIGHTS!

JOURNAL OF LIGHTING FOR ENTERTAINMENT AND ARCHITECTURE INCORPORATING TABS

AUGUST 1994

VOL. 5 ISSUE 2



Strand Lighting
80 YEARS
OF LIGHTING FOR
ENTERTAINMENT

ISSN 0958-7217



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ACT 6+



Your favourite budget - priced dimmer now has another big PLUS ...

Act 6, the popular budget-priced, 6 way analogue dimmer - plus DMX512 - equals new Act 6+, an exciting new low-cost digital / analogue dimmer pack from Strand.

NOW WITH ANALOGUE & DMX512 INPUTS

The same size and weight as the previous Act 6 design, the new Act 6+ features double sockets and +/- 10 Volt analogue inputs as standard, plus:

- Optional plug-in multimux module
- Standard multiplex protocols - DMX512 and D54
- Mux input combines with analogue inputs
- Stand alone programmable chaser functions

Affordable digital dimming has arrived. Call us today, or talk to your Strand dealer for more information about Act 6+.



Strand Lighting

80 YEARS OF STRAND

In this issue of *Lights!* we indulge in a degree of retrospection and nostalgia, which seems only right when any company celebrates a continuous 80 years in business. But we also celebrate the introduction of another broad spectrum of new product, demonstrating if proof were needed, the continuing commitment of Strand Lighting to innovation and product improvement.

The outbreak of hostilities that developed into the First World War of 1914-1918 may not have seemed appropriate circumstances to provide an auspicious start for the fledgling Strand. But despite such difficult circumstances the enterprise flourished. Today eighty years on, through economic depressions, boom years and a second world war, the company looks confidently forward to the next century.

We continue to announce new control products - the LBX™ which replaces Lightboard M™ and like GSX™, announced in our last issue, operates with Strand's Genius software package. And in this issue we launch Strand's Genius™ Users Group.

Digital dimming moves forward in both smart features and affordability, with the announcement of Strand's EC 90 Supervisor™ dimmer racks. The advent of Toccata™ - a new 2.5kW spotlight range - utilising condenser lenses, offers a new optical standard which should find immediate favour with opera houses and similar larger venues. A new Colour Call is also reviewed. Remember opportunities to view new product continues at a number of major exhibitions taking place during the autumn period including PLASA where we have news of a special entrance ticket offer to *Lights!* readers.

Strand also announces a new fluorescent softlight range, which spearheads the "Low Energy Studio" programme. Due to improvements in camera responsiveness and developments in compact fluorescent lamps operated from high efficiency ballasts; the benefits of low energy consumption and a cooler working environment can be realised in many of today's smaller studios. New for location lighting are four spotlights - two fresnels and two Parlights - designed around the new generation of single ended daylight sources. The Super Novas™ and Super Quasars™. We have added to our suspension range with Lightscope™ - a single point telescopic hanger - and Super Rig™ a heavy duty track and beam system.

We also have a new catalogue for our English readers.

This issue of *Lights!* also carries a selection of some of Strand's prestige projects around the world - Opera houses in Britain, home shopping in the U.S.A., ballet from Moscow, lighting in Hong Kong, and all our regular technical and review features.



29 King Street, Covent Garden - Strand's once famous beadquarters in the heart of London's theatreland.

Lights! is published in three editions - English, North American and German - with a combined print circulation of over 30,000 copies.

Editorial Board: David Brooks, BSc., CEng, MIEE, DMS, Andy Collier BSc(Hons), Edward Pagett BSc(Hons), AMIEE, Mike Cawte NDD, Steve Norman BA (Hons), MBA, Ulrich Kunkel Dipl. Ing.

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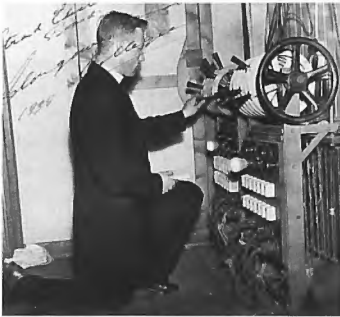
Ivana Trump demonstrates jewellery pieces for The Home Shopping Network on page 22.

Front cover: Strand Lighting "80 Years of Lighting for Entertainment" illustration.

1914 - 1994

STRAND AT 80

Eighty years ago, with the registration of its first lantern housing design, the Strand Electric Company began. Thanks to Fred Bentham's involvement in the company from 1932 to 1974 with his prodigious writing skill, and the talents of his contemporaries, the diverse history of the company is extremely well documented.



Strand Library

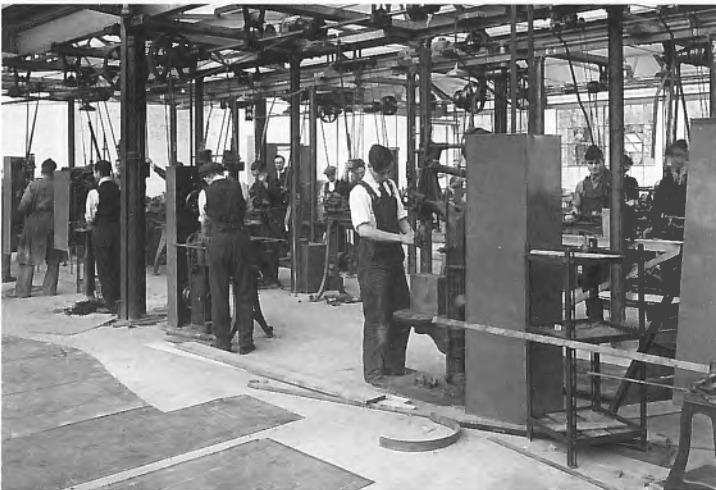
"Let us pray it works..."

But what has today's multi-million pound, multi-national Strand Lighting, a company within the Film and Television Division of The Rank Organisation Plc, got in common with Arthur Earnshaw and Phillip Sheridan's fledgling Strand Electric of 1914? The answer is its staff's commitment to lighting for entertainment. The fact that the

company has survived so long is due to its ability to respond to the prevailing industry requirements and conditions. Knowing when to go it alone, and when to work with agents and dealers. Knowing when to broaden the range of services offered, and when to re-focus on core business. Knowing which new technology to develop for the industry, and when to let others learn some pioneering lessons first.

Undoubtedly the biggest benefit of being an old-established company is learning through experience, and having the means to evaluate new ideas with the help of hindsight. But this does not mean that Strand is standing still, wallowing in past glories. As can be seen from the latest catalogue, Strand is leading the world with disk-software based consoles, high performance digital dimming, and system wide control. Strand is at the forefront of the latest thinking in theatrical and TV lighting. And there is much more on the way.

To celebrate Strand's 80th birthday, *Lighting and Sound International* printed a special 16-page feature and to complement this publication, we've decided to take a sideways look at the past 80 years with a personal reminiscence, and a few dusty photographs from the archives.



Strand Library

Manufacturing at Power Road, Chiswick - 1932.



Strand Library

Strand products take to the road...



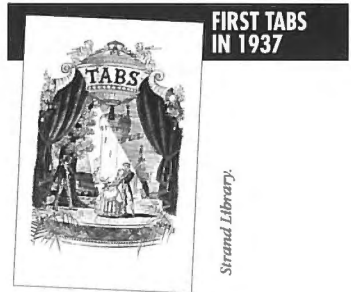
Strand Library

...and the air!

LOOKING BACK THROUGH TABS

Viewed from a distance of some fifty years, surrounded by the latest desktop publishing computerised gadgets, photograph-bending software, electronic text transmission and E-mailed articles, we were full of admiration when we saw for the first time the father of the modern day *Lights!* - the first pioneering issue of *TABS*.

Even from the outset, the 12-page A5 booklet was undoubtedly *TABS*. The evocative pen drawing on the cover, showing a theatrical melodrama with spotlit actors, remained in place until 1963 and became an internationally-known logo for Strand.



FIRST TABS IN 1937

Strand Library

The original *TABS* cover illustration.

The first edition of *TABS* boldly proclaims, "Issued by the Strand Electric Company in the interests of the amateur theatre." This set the course for the editorial style; conversational, informative, respectful that amateurs may not have the technical or practical knowledge of the professionals, but were, in the pages of *TABS* at least, more important than the professionals.

The change in cover design in 1963, and the omission of the reference to amateur theatre, resulted from a conversation in the back of a London taxi between the celebrated set designer Sean Kenny and Fred Bentham. When Kenny remarked that he was a fan of *TABS* but that he couldn't differentiate between one edition and the other because the covers were always the same, the captive taxi audience, who just happened to be the editor of *TABS*, took immediate action. Amateur it was no longer; and photographs replaced the drawing.

Back in October 1937, the first edition was undoubtedly a 'toe in the water', there wasn't even an issue number or date. But the sentiments of the company haven't changed much in the intervening fifty years, as the first editorial shows;

"From the professional stage we obtain information about the uses of most of our lanterns and effects, which enables us to amend or improve their design and to cater for the particular requirements of this branch of lighting, but many of our lanterns are primarily designed for small stages which have their own problems. It is of these problems that we hear so little and of which we want to hear more."

In addition to advertising the hire facilities of Strand Electric (a 500W baby spot would cost you 6s 6d [33p] a week and a 12 watt dimmer board 42s [£2.10] a week to hire), the magazine described the new northern branch in Oldham Road, Manchester, and introduced a new lantern - the Pattern 73 1000W mirror spot.

The astonishing fact in those immediate pre-War years was that *TABS* was so frequent; October and November 1937, five editions the following year, and the final edition in April 1939 (until 1946) by which time it had grown to a 24 page magazine. Its popularity grew owing to its unique appeal, and the quality of the advice given to its readers. Early editions of *TABS* make frequent reference to the healthy relationship created between the company, its magazine and its readers, and it is encouraging to hear so many similar sentiments from the readers of *Lights!* fifty seven years on.

We hope to be developing *Lights!* further in the future, and always welcome our reader's comments and input from wherever you are in the world, or from those, as we said back in 1937, that we hear so little and of which we want to hear more.

TABS EDITIONS

We are regularly asked by researchers, authors and students about articles in *TABS*, the original Strand Electric journal which was eventually superseded, after an absence of four years, by *Lights!*

Alas, Strand's own collection does not include the pre-War editions, starting in October 1937, but the archive is now complete from Volume 4 (September 1946) thanks to the help of several readers who answered a previous plea for older editions. We are always very happy to supply historical material from our *TABS* archive for students and authors, so if anyone is able to donate copies of *TABS* volumes 1 to 3 to us, they will be helping a whole new generation of students who regularly refer to Strand for help.

During a recent foray into the archives, we produced a list of every edition of *TABS*, and for the collectors amongst you, the list is printed in Fact Sheet 14.

Also, we have been contacted by Phil Windsor who has been tackling the unenviable task of creating the complete *TABS* index. Mr. Windsor has kindly donated a copy of the index which we have added to our Fact Sheet 14. David Wilmore has sent a photocopy of the first edition for our archive (see item on this page). If you would like a copy of Phil Windsor's *TABS* index, or a photocopy of the first edition of *TABS*, please write to The Marketing Department, Strand Lighting, Syon Lane, Isleworth TW7 5QD, or mark and return the enclosed reader reply card.



SPOTLIGHT ON ITALIAN FASHION

Between 12th March and 15th April 1994, the well-known premises of the Palazzo Delle Esposizioni in Rome exhibited the work of a man considered Italy's most prestigious living fashion designer: Roberto Capucci.

Unlike the usual fashion-shows, Capucci has for many years preferred to display his work in the halls of museums, presenting his creations as true sculptures. These are displayed on mannequins in tableaux depicting Stage, Nature, Music, Geometry, Architecture, Paintings, Light and Colours.

The most recent exhibit,



Minispots light the Roberto Capucci exhibition in Rome.

illustrated here, was designed by scenographer Bruno Gatofoalo, with sound by Fabrizio D'Ovidio.

The lighting, designed by Franco Caimi, uses 50 Strand Minispot Profile spotlights to supplement standard equipment. Minispot is particularly suitable for

this type of application because of the long lamp life of the low voltage dichroic lamps used. The Minispots' beam shaping and colour/gobo projection capabilities are normally only found in a full-sized theatrical spotlight. A Premiere™ system is used to control the lighting, with

each tableau assigned as a "room" within the system, allowing unique lighting scenes to be created and played back independently from simple push-button control panels situated within each area.

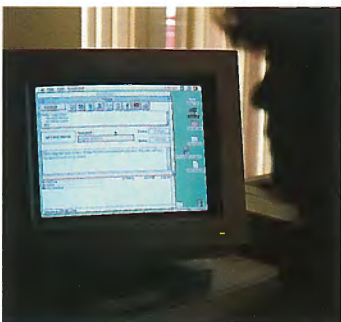


ELECTRONIC MAIL MAKING THE WORLD A SMALLER PLACE

The growth of communications by personal computer and modem is breathtaking, and for some time now the Strand group of companies has been using the benefits of electronic mail to communicate from desk to desk throughout the world.

The speed and simplicity of typing a note on your computer in say Los Angeles, knowing that it will be displayed on the screen of the recipient in London or Toronto within a few hours has transformed Strand's inter-company communications. Computer programs, updates and service information are also buzzing through the network from one Strand centre to another.

To make ourselves more contactable, we have set up a *Lights!* address on the Internet system. If you have any comments, news or views that you would like to discuss with us, please address it to Internet: lights@stranduk.com.



SPECIAL PLASA SHOW DEAL EXCLUSIVE FOR "LIGHTS!" READERS

Lights! magazine, in conjunction with PLASA, is delighted to announce a special deal for all our readers attending London's popular lighting and sound event - the PLASA Light and Sound Show '94 - being staged this September at the ultra-modern Earls Court 2 venue. We have teamed up with the show organisers to bring you, our valued readers, the best deal ever when attending the biggest and most exciting show event in the calendar.

So if you are a regular visitor to PLASA, use the *Lights!* registration card contained in this issue to save money on your entrance fee. A massive £6 off the normal £10 rate if you pre-register using the *Lights!* card.

Alternatively, use the *Lights!* card for express registration using the Strand/*Lights!* entrance booth to the show. Full price admission will apply but you can reduce queuing to a minimum.

Never visited PLASA before?

Then why not take advantage of *Lights!* special party discount programme? We have arranged an extra special deal for our readers who would like to visit PLASA, but perhaps have been put off in the past, not wishing to visit on their own. We introduce the *Lights!* PLASA Party ticket. Ideal for Amateur Societies or Educational groups; up to five group members can be admitted on the same £10 ticket! A whopping saving of £40! Simply return the pre-registration card accompanied by a list of up to four additional names on



Crowds gather for the opening of PLASA '94.

your group headed note paper.

Too busy, or work commitments prevent you visiting? Then why not visit PLASA on the Sunday opening day? Or if you work in or around London, then why not come along late afternoon? The show is open until 6pm.

When you arrive at PLASA go straight to the *Lights!* booth on the Strand Lighting stand, with your *Lights!* prize draw card to be entered into our special PLASA draw to win fabulous prizes.

Make sure you see the new product featured in this issue of *Lights!* on the Strand Lighting stand (A 206) - LBX, Leko, Toccata, EC 90 Supervisor and Strand software. Also your opportunity to buy Strand Education Resource Packs, Strand souvenir T-shirts and clothing, Fred Bentham's best selling autobiography - all at our usual low prices - plus free gifts for all show purchases to celebrate our 80th anniversary.

PLASA 1994

11th to 14th September 1994
Earls Court 2, London.

11am - 6pm (5pm on 14th)

Travel:

London Underground District, Circle and Piccadilly lines to Earls Court (exit via Warwick Road) or District Line to West Brompton. Car parking at Earls Court Multi-storey Car Park below Earls Court 2, or Seagrave Road Car Park just opposite the Exhibition Centre.

For further information call the following numbers, quoting the PLASA Lighting and Sound Show, and mentioning you have seen this item in *Lights!*:

Overseas Visitors:
Telephone: +44 81 564 8888

UK Visitors:
Telephone: 0800 335588
(freephone)

TOCCATA

A BRIGHTER, CLEARER SPOTLIGHT



The New Toccatas 10/26 and 15/38.

The name of Strand's latest addition to its theatre spotlight range - the 2.5kW Toccata™ - has been carefully chosen. Toccata™, from the Italian verb *toccare* (to touch), is a musical term meaning "a composition intended to display the performer's touch". Lighting design is essentially a creative art form, and those that excel are particularly inventive in their use of equipment and its effect. To the uninitiated one paint brush is just like another, but to the painter each one has its own characteristic. Luminaires, like paint brushes, all have their place

and use. Each has its advantage, as well as suitability for a particular task.

Over recent years Strand has introduced a wider range of luminaires than ever before. An example is the Optique, a 1.2kW profile spotlight which includes a spherical reflector and a condenser lens to form near-parallel light rays through the gate. When focused, shutter blades have an unmistakable clarity. Gobos inserted within the gate project more sharply, and have higher contrast. But why stop at 1.2kW? In answer to designers' pleas for a more powerful condenser optic luminaire, the Toccata was born.

SHARPER FOCUS

Toccata is our most powerful tungsten halogen condenser optic luminaire, rated at a full 2.5kW. Toccata, which is based on the successful Alto housing, incorporates a G22 lampholder chosen for both its reliability and the potential to fit either a 2.5kW CP91 or a 2kW CP92, for situations where 2.5kW dimmers are not available.

Toccata is a classic condenser optic luminaire, with a flat even beam ideal for beam "sculpture". Whether it is with the shutters or gobos, the result is sharp and precise. The flatter beam of the condenser optical system is well suited to gobo projection for two reasons: the parallel rays passing through the 'A' size gobo reduce the flare considerably; a flat beam distribution increases the life of the gobo. The integral fan, which is necessary to cool a condenser lens operating at this power level, also significantly reduces the temperature of a glowing gobo; another factor in extending its life.

WHITER LIGHT

Another characteristic which will be appreciated by lighting designers, is that it appears whiter than the beam of a conventional reflector optic luminaire. This is due to the high quality crown glass, and the same specification has been carried from Optique to Toccata. A total of five lenses maintain the optical clarity and reduce chromatic aberration (the blue or red fringing at the edge of the beam due to the index of refraction being different for different colours).

The choice of condenser optics also allow the designer greater beam angle flexibility from a single spotlight. Toccata, like Optique, has only two versions to cover a beam angle range that would normally require three reflector optic luminaires. Toccata 15° to 38° and Toccata 10° to 26° have significant beam angle overlap in the mid range, and a further benefit of the condenser design is the compact length.

SIX SHUTTER BLADES

In designing Toccata, particular attention was given to providing features that compliment the condenser optical system. A triple-plane gate with six shutter blades is included as standard, to produce a

wider range of shutter cuts, including the elusive triangular shapes as well as polygons and hexagons. The specification of the iris has been increased from the normal 18-leaf to 24-leaf to give a closer approximation to a circle through-out its range of control.

LIGHTWEIGHT

The weight of spotlights has always been a sensitive issue to technicians, and a great effort has been made to ensure Toccatas are the lightest weight in their class. Shape is often as important as weight when regularly lifting and handling product, and the contoured housing of the Toccata makes it easier to manoeuvre. Even the rear handle has been made more comfortable!



Toccata's 6-shutter gate in action.

UPDATE ON COLOURCALL SCROLLER



New ColourCall Scroller

Strand's new ColourCall™ for 2kW to 5kW luminaires is packed with additional features and is available at a competitive price. Replacing the previous unit, the new ColourCall is the larger of the two scrollers in the range.

It is lighter, with a massive reduction in weight to 5.5kg (previously 9.5kg) and it has a simpler, and more convenient method of attaching to most Strand Television and Film luminaires. Also, Pollux Barn-doors now can be easily fitted to the product, without additional accessory plates.

The exclusive Strand gel scroll "easy load" functionality is provided as standard, and the Colour Call will operate with DMX 512 or PALS digital protocols.

"BUCKETS OF LIGHT"

As automated Lighting wiggles its way into an ever increasing variety of productions (from rock concert to legitimate theatre), institutes that train and educate lighting designers of the future should awaken to changing trends and industry demands and expectations." So says Head of Lighting for the Academy For Performing Arts in Hong Kong, British lighting designer John A. Williams. "When better for future professionals to gain an understanding of the power and versatility of these tools than when they are studying to enter

colour scrollers up in the rig, cross fades between scenes become so much more interesting when programmed as cross-moves. A sweep of light filling the stage as the PALS move and spread their lumens to build a state (like a bucket of light being poured onto the floor), is a wonderful change from the old cross fade or state build.... especially if a colour change is incorporated at the same time. A moving focus into a performer (as though you are iris-ing in the entire state), rather than the usual reduction and special is just pure magic!"

John is obviously pleased he is able to offer, what must be, one of



PALS at work...

the profession that use them. There is just no time on site, for most of us, to 'learn' how to use robotics to their best advantage. By that, I mean other than effect lighting where many elements can be pre-programmed prior to arrival at the venue".

The Hong Kong Academy has recently taken delivery of a fourteen head rig of robotics. Eight of which might be described as "full wiggle lights" producing effects and dynamics, the other six for a variety of design requirements that include true integration into a basic rig.

John says, "It was to serve the needs of the latter category that we chose Strand's PALS™. I must have been zapped by every wiggle available at LDI, but when deciding on an automated instrument we could usefully use in all the disciplines we work in here (Drama, Opera, Musicals, Dance), Strand PALS became the obvious choice. Of course we need the all singing all dancing instrument as well from time to time, but the PAL is such a good and reliable work horse, and with time you can get an awful lot out of them.

"I have just lit Twelfth Night for the Academy, reducing the size of my basic rig by incorporating PALS. Apart from the obvious advantages of having a set of mobile lights with



...and John Williams at work.

the few formal automated lighting courses anywhere in the world. Now offered in year two of the Academy's BFA degree program, the resource gives every lighting student an opportunity to incorporate automated lights (first PALS then effect instruments) in numerous project productions (including industrials) and, of course, in their final year main house shows.

"All quality lighting programs should offer students the opportunity to work with robotics and to become conversant with their design potential", stresses John. "Drama schools, colleges and universities equipping for the future really should consider including a rig of automated lights in their inventory... and maybe reduce the stand still and point fixtures!"



STONEWALL AT STONE MOUNTAIN



Laser Light Show. Stone Mountain Park.

Today, millions visit a remarkable work of nature just a few miles outside Atlanta, Georgia. It is the world's largest granite monolith, formed some 300 million years ago by a surge of molten lava from beneath the earth's surface.

Rising 825 feet above the ground, the giant rock is at the center of Stone Mountain Park, a 3,200 acre playground that features woodlands, lakes, recreation areas, inns, restaurants and a convention center.

In 1923 sculptors began carving a bas-relief memorial to the Confederacy, but the work was not completed until 1972. It is now the largest of its kind anywhere. Featuring Jefferson Davis, and two of his most beloved Generals, Robert E. Lee and Stonewall Jackson, it covers a 90' x 190' area on the rock face. It is not therefore surprising that the park reflects the tumultuous history of the South in its museums and attractions.

However, the park's appeal goes beyond history and serves as a complete family entertainment center. One event that thrills millions of visitors are the laser light shows. Every night during the summer, and at weekends during the remainder of the year, spectacular images are projected against the mountain. Dramatic stories, comical characters and graphic images are choreographed to popular music. It is the ultimate "Son et Lumiere" show. Such a show requires state of the art control



Memorial to the Confederacy, a few miles outside Atlanta, Georgia.

equipment. Eight years ago Strand Lighting furnished two CD 80™ racks, and a Lightpalette V6. In 1994 the racks were upgraded by retrofitting Advanced Electronics, and the console was replaced by a mini Lightpalette™ 90. The signals from the console to the racks are transmitted through fibre optic cables, with the DMX signal converted by an interface, then reconstituted at the racks. This provides protection against the effects of voltage problems or electrical storms. A total of 148 Lekos are used to create the lighting effects on the bas-relief, in conjunction with the laser show.



One September morning in 1959 Philip Rose found himself sailing towards Montreal from Britain with four hundred overprinted Strand Electric catalogues.

FROM LITTLE ACORNS

The spring of 1959 saw the opening of Strand Electric's own office in Canada. Before then there had been the occasional direct sale and Kliegl were selling Cinemoid and had an arrangement to market Strand's Thyatron tube dimming.

The design of Stratford Ontario's Festival Theatre had found Strand Pageant beam spots an ideal solution to its unique (at the time) lighting needs and, in those years before the stranglehold of television viewing eclipsed them, two or three Canadian repertory theatres, with UK origins, used some Strand equipment.

But it had been the middle of 1957 when Strand's Chairman Jack Sheridan decided it was time we did something about North America. No doubt the firm's success in Australia encouraged him. Jack, if nothing else, was a cautious man, well inoculated against the excesses of enthusiastic marketing men but he was strongly attracted to the idea of a Canadian Branch.

However, unanimous support at Board level there was not. One or two, who subsequently became keen "NA-philies" were anti the mere thought of tackling Canada and the States. However, Jack 'persuaded' the doubters that we should risk a modest sum and Frank "Tubby" Martin was despatched on a lightning (cheap!) cross-Canada tour to check out the territory. As I recall, his report was less than enthusiastic - Big country - small population - undeveloped theatre market - 120 volts and the Canadian Standards Association's 3" high stack of design, technical and safety requirements.

Jack had an internal fight on his hands but, with a little encouragement from those of us who thought the idea of a Canadian Branch long overdue, he gave "Bill" Lorraine the job of seeing that the appropriate parts of Strand's range were modified for 120V and submitted to CSA.

Some eighteen months later the core of Strand's range had CSA approval and was ready to go. The cost had been more than Jack would have liked, but once testing had started we were committed.

Pending CSA, planning had

been put on 'hold', but by the end of 1958 it was green for go. There had been a suggestion that we appoint an agent but Jack wisely accepted we had to have our own operation, and, unlike the competition, CSA approval and stock in Canada.

WE OPEN IN TORONTO

During the CSA approvals period Strand had been approached by Leslie Yeo, an actor who had been running a theatre company in Nova Scotia. When it closed, the ease he had in selling off his collection of Strand lights gave him the idea of selling more and he formed a short lived company (although not having a Strand sales agreement), "Area Lighting", with Jimmy Fuller in Toronto.



Where it all began. Now part of the Yonge/Bloor Underground Transit system.

However, with the demise of "Area Lighting" in early 1959, Jack suggested that Leslie join Strand and, with Bill Lorraine, who would move from the UK, jointly run the Branch. Shortly afterwards a shop was leased and 755 Yonge Street became the first launch pad for Strand North America. They had to move quickly as the first shipment was on its way.

During the next few weeks tons of equipment arrived - for stock, and to set up a fully equipped demonstration room. As everything came by sea in those days the heavy packing cases were, with time-honoured Strand Electric economy, used to make all the storage racks. At the same time Bill was working night and day to create and set up the demo room. Staff consisted of Bill, Leslie, and maid of all work, Beatrice, plus the odd temp for unpacking and carrying. The new branch was not only to market Strand equipment but also had the exclusive agency for Hall Stage Equipment in North America and, on early jobs we even brought in Drapes and Sound from the UK.

But, problems soon began to appear. Maybe the time scale was too tight, the objectives optimistic; whatever the causes it was clear that the plan and structure had to be changed.

It was decided that Bill would return to the UK and that I would take over his role.

"That was how I found myself, after a rough passage from Liverpool, one September 1959 morning sailing towards Montreal and enjoying the early fall scents of the St. Lawrence."

ENTER PHILIP ROSE, ON A TIGHT BUDGET

First task on disembarking was to locate the precious package of the first 400 Canadian overprinted UK catalogues and then scramble to catch the overnight train to Toronto. No one had thought to book a sleeper or even a soft seat - maybe they had but Strand economy had triumphed. A slatted wooden seat kept me nicely awake until, bleary eyed and full of second thoughts I arrived with the dawn at Union Station in Toronto.

Leslie was there and we met for the first time. "By the way" he said over breakfast, "I've made a 9 o'clock appointment for you at the University of Toronto Schools". A shower and change of clothing would have to wait and sleep certainly wasn't on the agenda.

At 9am we met "Red" Hobson of Ontario Electric - (he and I subsequently worked on many projects together) - and by noon I had the order for my first Canadian job - a 36 way Saturable Reactor dimming system with a full complement of spots, floods and borderlights.

The hotel at last. I should have been alerted by the rate, \$3.50 a night (Sterling exchange rate \$3.05 to the pound at the time). "When you are ready" said Leslie, "come along to the office, it's only about a twenty five minutes walk along Bloor, not worth a taxi". I sensed we were on a tight budget! Just where I was, soon became clear when a light tap on the door revealed a Kimono-clad lady wondering if I had a match and, "was there anything I needed?" Sleep was all I could think of.



Beatrice giving a Sunspot Arc demo.

Within days I was up to my neck in projects for schools, studios and theatres, from scheme designs (we acted as unpaid theatre consultants and guest lighting designers in those days), to lectures and demonstrations. I loved it all and clearly Canada was for me.

STRAND BECOMES MARKET LEADER

Within two years Strand was fast becoming market leader in Canada and had even appointed its own agent in the States - Norcostco in Minneapolis - quickly superseded by its own Branch - yes, an American

subsidiary of what had become Strand's Canadian Company - no longer a UK Branch.

For me, with some super colleagues, the next fifteen years saw Strand, later joined by Century under the Rank Organisation banner, become the leading force in Theatre, Television and Architectural lighting, not only commercially, but in thinking, innovation and development.

Looking back, the end of the fifties was not only the commercial dawning for Strand in North America but also a time for great



Part of Yonge Street budget modular stores racking system.

technical change. Early solid state dimming had arrived. The drive to store lighting levels and groups was producing many ingenious solutions from punched cards, magnetic platters (precursor of today's credit cards), Ferrite and Drum stores. Younger readers will not believe how much time was spent at conferences, such as those of USITT and SMPTE and the like discussing dimmer law curves - Square Law, Cube Law, S Law and other esoteric aspects of the new technology. As for luminaires the Quartz Iodine Lamp, as the TH was called in the early days, was hovering in the wings about to revolutionise fixture and lighting design.

Within a few years the electrical worlds of 120V and 240V were less different and the opportunities for universal product and applications designs were increasing all the time.

The impact on Strand as a whole and how the fledgling Strand North America coped with all this and a succession of major projects, is a longer story, for another time, maybe.



© Philip Rose 1994

Philip Rose joined The Strand Electric & Engineering Co. Ltd. in 1941. After war service in the Royal Air Force he re-joined Strand in Len Applebee's Theatre Lighting Department. After moving to Canada in 1959 he became President of Strand North America in 1962 and joined the main London Board in 1968 becoming President of Century Strand when it moved to Los Angeles shortly after Rank's acquisition of Century in 1969.

He moved to the UK in 1974 with responsibility for International Marketing and Product Development. He is now retired.

For the inhabitants of one island in the Hawaiian chain, enjoying the arts has not been easy. Maui had long attracted tourists and film-makers, and as early as 1960 people had recognised the need for a theatre, but the project was dropped in the 1970's because of the expense. Brian Hartley's story begins in 1987 when over \$25 million was raised for the new...

MAUI ARTS AND CULTURAL CENTER



A little over ten years ago Honolulu based John Hara Associates, Inc. were selected out of a group numbering 45 architects, to undertake the project. Says John Hara "The design of the center is the result of a very long process. The original concept, of grouping a number of facilities around an amphitheatre surrounded by a wall has endured."

By talking to local art and community groups this concept grew into a very real one. Not just a theatre, not just a commercial venture. This Center would reflect the artistic skills of the famous, as well as the unknown amateur. In these buildings a variety of functions would be held that would not just invite community involvement but also demand it.

Such a venture required consultants that, in Hara's words "were the best in the world." He got them. Josh Dachs from Jules Fisher/Joshua Dachs and Associates Theatre Design of New York, and Larry Kirkegaard of Kirkegaard and Associates, based in Chicago.

For Josh Dachs the concept was a welcome relief. He had seen so many civic projects that never took into account the users. Subsequently the end results were often "nameless, faceless, generic". On Maui he was part of a project "where the potential residents of the house were involved in the initial discussions". It really is quite an impressive residence.

Surrounding the site is a 700 foot rock wall, a Kumupa'a, it is 6 feet tall with a 4 foot wide base that tapers to 3 feet at the top. In the wall are gates of a unique design representing Hawaiian fishnets. The Nets of Makali'i were fabricated at the University of Tasmania in the Art Foundry.

THEATRE CALLS FOR STRAND

The main theatre - the Harold K.L. Castle Theatre - with an audience capacity of 1200, could have been large. However it was essential that a sense of intimacy was maintained. Josh wanted the audience to be aware of each other. Not for him a 20th Century movie emporium more the look and feel of the theatre of Elizabethan England. Balconies wrapping back to the stage and a room "wallpapered with faces." Strand provided CD80 Advanced Electronics dimmer racks for the performance and house dimming, controlled by a Lightpalette 90.

The McCoy Theatre is an intimate studio theatre, and it is intimate in every sense of the word. A "black box" lending itself to plays that require a minimum of scenery



The 1200 seat auditorium of the Castle Theatre.



As storm clouds gather a brightly lit center beckons to the visitor.

and props, recitals, small ensembles and the like. The capacity is 300, in the style of "theatre in the round." A fixed grid accommodates the lighting rig, controlled by a 48-channel Mantrix MX console and CD80AE rack.

Outside, the 4000 capacity Amphitheatre takes full advantage of the wonderful scenery, the ocean and the tradewinds. For performers

being on stage there is a breathtaking experience. Behind the scenery a mini Lightpalette 90 and CD80 Rolling rack combo controls the lighting.

Elsewhere in the complex are galleries, meeting rooms, rehearsal areas, and administrative buildings. Further proof, if it were needed, that this center is for the benefit of all.

Only in one area has a

particular culture been highlighted. Close by the amphitheatre, in deference to Hawaiian tradition a Pa Hula has been established. This rock faced earth mound is a tradition deeply rooted in the Islands. It is a special place, for hula, for chanting, for storytelling. Hawaiian performers leave part of themselves whenever they perform. Thus their talents are transferred to future performers.

OPENING IN STYLE

On a three-day May weekend the people of Maui celebrated the opening of their Center and a total of thirty thousand people attended. It was an outstanding success. True to their ideals the organisers made certain that the bill of fare was widely diverse; theatre, dance, music of all kinds, weaving, cooking, poetry, a variety of ethnically rooted performances, flower arranging... the list was endless. The people of Maui had come to visit their cultural home for the very first time and liked it very much.

The Center's logo uses petroglyph imagery, which reflects the Center's association with Hawaii. The bird being released by a human figure symbolises free expression of the creative spirit and the practice of art.

STRAND AND GLYNDEBOURNE

Glyndebourne has a long established history with Strand Lighting, with the first ever Thyristor Dimming installation in Europe in 1964.

The control system installed to complement the dimmers, was a four preset manual system; specified by the lighting designer, Francis Reid. This system was subsequently replaced by the 200th MMS (Modular Memory System) and STM dimmers in 1977; this time specified by lighting designer Robert Bryant and Glyndebourne's chief technician Jim Thomas. This MMS had the novel features of having a colour VDU - a Barco, frequently "stolen" by the television companies, for a "shot" monitor when recording in the Opera House. Galaxy was first used at Glyndebourne in the 1987 season, when a Galaxy 3 system was installed. This system, together with touring Strand Act 6 dimmers packaged by Howard Eaton Lighting, today makes the core part of the Glyndebourne Touring system, seen in many major UK theatres during their tours.

GALAXY NOVA AND EC90 DIGITAL DIMMERS REPORT BACK

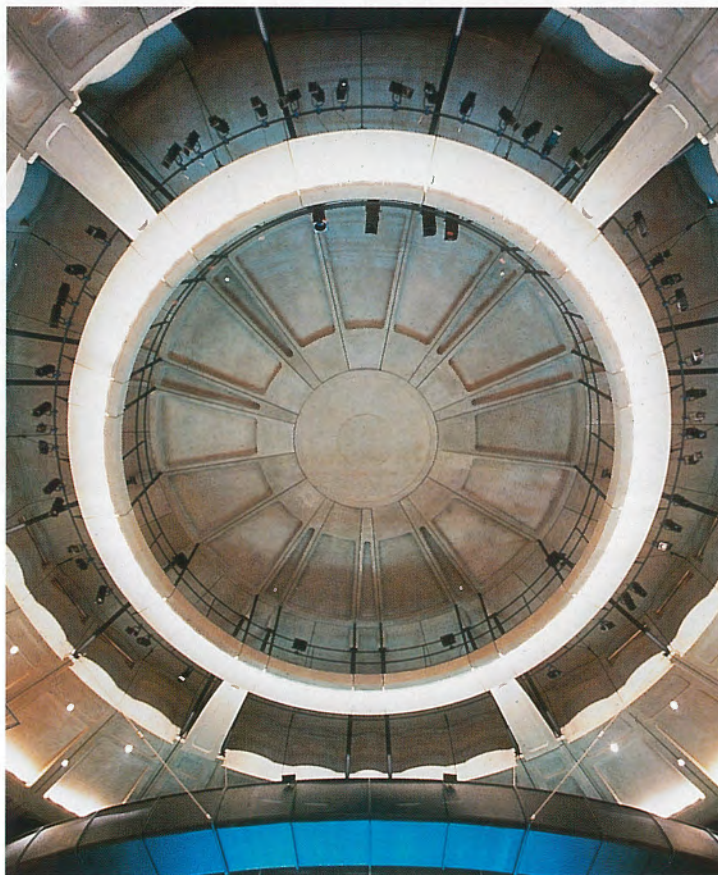
It was no surprise that Strand Lighting was chosen for the supply of the stage, house and work lighting controls, production and house lighting dimming systems and luminaires. The two-year design, manufacture and supply project was won by Project Sales Manager Alan Luxford, and planned and managed at Strand by Bill Richards, whose tasks included liaison with consultants Alan Russell and Chris Watts of Theatre Projects, Glyndebourne's Lighting Manager, Keith Benson, and contract managers.

The contract was awarded to Strand as Production Lighting Contractors via Bovis Construction, with Matthew Hall Ltd responsible for amongst other things, the production lighting wiring, this aspect being sub-contracted to one of Strand's Main Distributors, Stage Electrics, managed by Jonathan Porter Goff.

The original Galaxy lighting desk was removed the day after the last performance in the old Opera House, and returned to Strand's Isleworth HQ for conversion to the latest version, the Galaxy Nova, with an additional set of electronics increasing the size to 768 channels. This not only added the new features of the top of the range console, but also included the interfaces for dimmer status reporting and sophisticated colour scroller control.

Six-hundred-and-sixteen dimmers are housed in eleven large EC90™ racks, located at different levels behind the cyclorama wall in 4 dimmer rooms. Modular design of the EC90 meant that the rack carcasses could be positioned in the dimmer rooms during the construction phase, with the modules (housing the digital electronics) being installed into a

clean environment nearly two months afterwards, when wiring was near complete. The advanced EC90MDplus digital dimmers, which included a selection of 3.8kW, 7.6kW and 10kW modules, constantly monitor their own performance, and report back to the Galaxy Nova, where information can be selected, and warning messages displayed on the screen, should a lamp fail or a circuit breaker trip.



The 'doughnut' and advanced lighting bridge, Glyndebourne Opera House.



Control room with a Galaxy Nova.

SPECIAL CONTROL NEEDS

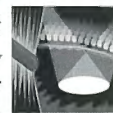
Specially developed for Glyndebourne was a 96 way contactor rack that uses the 'brains' of four Strand LD90™ digital processor units with custom software, to switch contactors on and off under the control of the Galaxy Nova DMX dimmer signals.

The house lighting system included Prelude™ 650W profile spotlights providing a gobo break-up wash over the wood panelling, low voltage down lights and coffer lighting, linked to EC90 dimmers, within the main complement of production dimmers. These dimmers are controlled from the Galaxy Nova, with an independent 'warming' level system ensuring a base minimum lighting level. A novel feature is that the house lights can be temporarily reduced to 'blackout' to support an important stage blackout by moving a sprung-loaded grand master fader. When pressure is released, the house lights automatically return to their previous base level.

The house lighting system may also be controlled locally without the Galaxy Nova, through internal EC90 preset memories that may be selected by push button outstations. Working lights are controlled by an additional Strand special contactor rack, and eight 'states' (which include day, night, show, rehearsal and interval states) are programmed into a PLC (programmable logic controller).

COLOURCALL SCROLLERS RING THE CHANGES

A second contract, this time directly with Glyndebourne Productions, included eighty-five Strand Colour Call™ 16 frame scrollers. These multi-protocol colour changers are controlled from Galaxy Nova's integrated colour system using MRI protocol (developed for PALS automated lighting) in preference to DMX, as it provides smoother control. The Galaxy Nova allows scrollers to be controlled using the same channel number as the host luminaire, with frames being selected directly from the keyboard. Additionally scrollers are controlled in isolation from dimmer levels, to avoid unintended resetting during a fade to blackout. Further lanterns were added to Glyndebourne's existing stock of Strand luminaires, with additional Cantata™ and Cantata Optique™ 1200W zoom profile spotlights, some with special yokes, Alto™ 8/16 long-throw 2.5kW profiles, and Castor Bambino™ 2kW Fresnels.



THE SUPER STAR GALAXY NOVA

Galaxy Nova™ has attained its position as the leading high-specification console through a high quality pedigree. The original Galaxy was launched in 1980, and it owed much to the console specified by Richard Pilbrow for London's National Theatre in 1974 - the Lightboard.

The Lightboard (or 'Total Control System' abbreviated to TCS as it was originally known) was developed from Richard Pilbrow's concepts for the total control of all the attributes of light; intensity, colour, position. It was a 'playable' control, intuitive in operation, working the way the lighting designer thought, and providing lighting changes, effects, and projection changes at the push of a button. Its huge capacity enabled each lighting outlet in the theatre to be individually controlled through a dedicated dimmer, avoiding the use of patch panels. The concept of 'finger-tip control of various live blocks of light for comparative balancing' spawned a 'palette' of wheels, and passed an idea and a name across the Atlantic to Century and the Lightpalette.

Galaxy was launched in 1980, and its internal architecture was designed to accommodate the ideas of Lightboard, with the ability to expand in the future as new requirements evolved. The fact that Galaxy has grown, through four major re-designs, to its latest invocation, Galaxy Nova, is a tribute to the forethought of the original design team.

GALAXY - A COMPLETE SYSTEM

Nowhere else in the range of lighting equipment is the word 'system' more pertinent. Galaxy Nova isn't a single product, it is a combination of hardware and ideas which integrate to provide a central lighting control facility. Take the control surface as an example. The primary functions of the system are divided into individual modular panels, and it's not just the type of the panel which affects the operation of the console, but the quantity of each module chosen. The process of selecting panels from an extensive library of ten basic types actually moulds the 'personality' of the system. For example, a playhouse may require only a few panels giving straightforward recording and playback facilities whereas a variety theatre would choose more panels offering 'spontaneous' features, and programmable special effects, but not the advanced automated playback functions. A TV studio

would concentrate on panels offering multiple simultaneous control from different locations, fast record and re-recording and shot by shot playback features. An opera house system would provide the lighting designer the means to 'paint with light' using panels to mix and blend lighting states, and to remotely control the functions of an automated spotlight.

INTUITIVE DESIGN

Unfortunately, there isn't space here to even list all the functions of Galaxy Nova. It is a lighting designer's system; a lighting control which is more of an artistic tool than a computer. Galaxy's pedigree is obvious from the intuitive and rapid operation to the sophistication of some of the facilities which can only have been included with the help of user experience.

The Advanced Playback, an example of a customer specification, includes overriding access of up to 6 parts of a multi-part fade, and the ability to record and replay the 'profile' of a fade. Perform the fade manually, and Galaxy will record and reproduce the fade, with any pauses and variations in speed. The AutoMod feature accommodates the loss of a lamp or a spotlight which has been accidentally repositioned by temporarily over-riding the recorded cue sheet with selected alternatives.



Galaxy Nova with version C1 software was launched in 1992, and it is immediately distinguished from previous versions by its new appearance; grey control surfaces and housing. Hardware improvements included some redesigned panels, plus a new electronics crate, processor and memory cards. The dimmer status feedback facility, DFD, was included to receive and display the performance data from EC90™ MDplus or EC90 Supervisor dimmers.

Colour and motion control were further integrated into the



Galaxy Nova.

primary functionality of the system, with colour controls being directly accessible from the channel control, and positional recording facilities available on both the motion control and memory panels.

The colour control of Galaxy is particularly interesting, and it was developed in conjunction with the custom electronics of the ColourCall™ scroller. The Galaxy can be configured with colour scroller addresses linked to the channel number controlling the intensity of the host spotlight, avoiding the necessity of remembering a separate scroller number. With the scroller identified as a separate entity, the Galaxy Nova then excludes the scroller signal from general fades. For this level of control, the Galaxy outputs signals in its PALS™ protocol, called MRL. The added advantage of this is that the protocol supports a time parameter which provides the means for very smooth colour changes of up to 4 minutes.

NOW WITH NEW SOFTWARE

Version C2 software has recently been released, and this has added even more functions to the base program. For example, there are more options for system customisation, and for setting default information. Improvements were made to the motion control and playbacks (through the preset masters and group masters panels).

For those situations where full tracking backup systems are specified, Galaxy Nova can operate with dual electronics.

Galaxy Nova has already proved itself as the premier lighting control system, with recent installations at Glyndebourne, The Royal National Theatre, Edinburgh Festival Theatre, and imminent installations at the BBC Television Centre's Studio 8, Royal Opera House Covent Garden, and the Bolshoi Theatre.

THE FESTIVAL THEATRE EDINBURGH - ONE OF THE LARGEST IN EUROPE

The Festival Theatre Edinburgh has recently been equipped with a Galaxy™ Nova, EC90™ digital dimmer combination, plus a full rig of Strand luminaires.

Some 128 Alto™ 2.5kW, 132 Cantata™ 1.2kW and 20 Prelude™ profile spotlights provide the bulk of the lighting, together with 36 Cantata PC spots, 4 Prelude™ PC's and 4 each of Cantata and Prelude Fresnels. Of the more specialised lighting there are Pollux™ 5kW Fresnels, 500W and 1kW Beamlights™ plus a complement of Nocturne™ floods.

The Galaxy Nova (see page 11) is a 768 channel version and dimming comprises 10 large racks of EC90 MDplus - a total of 448 x

16A and 70 x 32A dimmers. House lighting can be controlled either by the Galaxy, or by three EC90 push-button wall stations situated in the auditorium. The equipment was supplied to Glantre Engineering whose project coordinators Mike Rowntree and Mark Davenport, worked with Simon Roose and Alan Luxford at Strand.

Theatre Projects acted as theatrical consultants, under the experienced guidance of Alan Russell. Architects were The Law and Dunbar-Nasmith Partnership. Graham Raith was the representative of the Edinburgh Festival Theatre responsible for what is believed to be one of the largest deliveries of theatre product in Europe.



Edinburgh Festival Theatre.

ROYAL OPERA HOUSE CHOOSES STRAND GALAXY NOVA

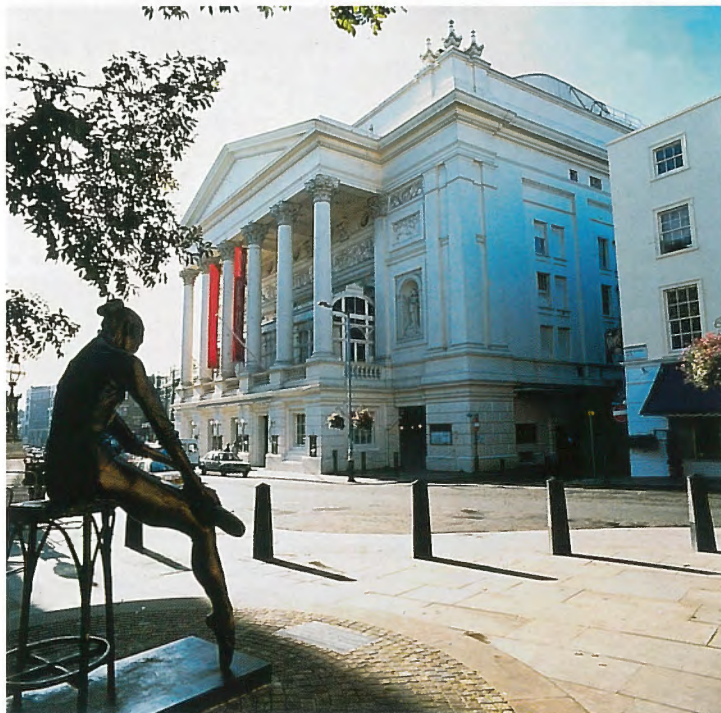
In the last issue of *Lights!* (Volume 5 Issue 1) we reported on the long relationship between Strand and London's famous Savoy Theatre. Through no less than five major refurbishments the theatre has been equipped with the very latest lighting technology from Strand.

In this issue we are pleased to report that the Royal Opera House in Covent Garden has chosen a new Strand Galaxy™ Nova lighting control system for delivery, in accordance with the theatre's planned schedule, in August this year. This is noteworthy because it was 1934 that Strand undertook its first large scale installation at the Royal Opera House for Sir Thomas Beecham. Later, in 1964, the first big installation of thyristor dimming in 1964 was also at this venue. So the latest vote of confidence in a return to Strand controls is most welcome and continues the tradition of selecting the very best equipment to match the Royal Opera House's own renowned high standards.

The Strand Galaxy Nova is probably the most advanced control system and a successor to Galaxy systems in use at many of the world's most demanding venues. Constructed in modular form allowing a high degree of customisation, Galaxy Nova has numerous top range

features, including bi-directional communication with EC90™ MDplus and EC90Supervisor™ digital dimmers, direct control for colour scrollers and up to 249 automated spotlights. The new

Galaxy Nova will complement the ROH's touring system. Alan Luxford, Project Sales Manager, and Bill Richards managed the Strand involvement for Lighting Manager, Paul Watson.



The Royal Opera House, Covent Garden.

BOLSHOI THEATRE

The word "bolshoi" means "big" in Russian, and that is certainly the word that best describes the latest Strand project in Eastern Europe, the world famous Bolshoi Theatre, home of the acclaimed Bolshoi Ballet.

On August 26th, the curtain will rise on a new season where for the first time the lighting will be controlled by a 827 channel Galaxy™ Nova and 762 EC90™ MDplus status-reporting digital dimmers. But the specification doesn't end there.

The Galaxy Nova will have a full tracking back-up, in this case that involves two control desks, two electronics crates and full automatic changeover providing 100% security.

Custom Russian language software means that all control system and dimmer fault reporting messages will be in Cyrillic - a first for Galaxy.

An 827 channel button mimic completes the line-up, providing a geographic auxiliary control facility.

Oscar Israilev is the Consultant Engineer for the Ukrainian State Project-Production Association "Dipromisto". Here he explains his ideas of "stage lightography".

A VIEW OF LIGHTING FROM THE UKRAINE

The concept of stage design is changing. The organisation of the theatrical space, the creation of the environment involving scenery, costumes, props, sound, lighting and stage equipment is acquiring a broader meaning, and a new name - scenography.

Stage lighting plays its part, and is one element of the overall 'scenography' in a theatrical performance. It is so closely linked with the whole, that problems of lighting are related to general problems of other elements of the scenography.

The effect of the theatrical environment and the performances of the actors both combine to influence the spectator. Thus the concept of scenography has evolved - no longer limited to dressing the scene, but expressing it; no longer creating the image of the scene but revealing the action itself through fluid movements which arouse the consciousness of the audience.

When you look at the wider implications of performance scenography, the design of the whole building, including the auditorium, foyer and circulation areas are also vitally important. However, a director may decide not to use stage machinery, costumes, scenery or sound, but he could never create a performance without light. Thus special attention has to be paid to lighting the performance, particularly the psychological effect of light on the audience.

The lighting environment is not static. As the performance progresses, so does the lighting. If you consider music, even at its most dramatic, it is not an illustration of a series of separate episodes, but musical themes connected together by a common factor - the image of the performance. In the same way, the lighting states and progressions should be closely connected by the concept of lighting the performance. Only then will the lighting be perceived by the audience as a homogeneous entity, expressing the image and essence of the performance.

DYNAMICS OF LIGHTING VARIABLES

The dynamics of the lighting environment can be considered to consist of three variable parameters: quantity, brightness and colour. Generally, the lighting environment spreads throughout the entire theatre building, inside and out, and anywhere there is light, colour and brightness are important factors.

When the lighting environment is created, many possibilities should be considered, from the

practicalities of visibility to the psychological influences on the audience. To summarise, the factors are: lighting the scenery to reveal its texture and to create an illusion; special lighting to imitate natural phenomena (dawn, sunset, fire) including dynamics, colour

transitions; the use of colour to identify and characterise the principal performers.

In the Kiev National Opera's production of Tchaikovsky's ballet *The Sleeping Beauty*, Viktor Gozchenko's lighting design changes continuously, blending

marvellously with the music. The wide variation in the colour theme follows the music and performance. The lighting leit-motives - lighting icons - are particularly effective. The appearance of a character, or an action, is accompanied by an emphasis of the light. Colour is often used to accentuate the ideas and notions and as a symbol of war, peace, threat etc.

Light is used to accentuate the dramatic development of the performance by emphasising areas of the scene and high-lighting characters to draw the attention of the audience to them. Light helps to influence the mood of the audience, and to create visual illusion. The development of the concept of light, to include the creation of the lighting atmosphere is the art that I call *Lightography*.

LIGHTOGRAPHY EXPLAINED

Stage lightography is an art form of equal importance to scenography. It has to follow the general rules of the theatre, and it has its own specific rules, some which are only recently being formulated and others are still not fully understood. The fact that it has developed now is due to the work of several prominent lighting designers. Nevertheless, there is a tendency to analyse another based on the physical laws of light and colour, and theorising about related arts and psychology.

In Musorgsky's opera *Khovanschina*, the Kiev National Opera's production, again lit by Viktor Gozchenko, includes scenes of bloody rebellion in the reign of Peter the Great. The symphonic introduction *Dawn over the Moscow River* accompanies a long slow lighting transition, gradually changing from night to day, prophesying the gloomy day of horrible events to come. The lighting plays an essential role in revealing the tragic fates of the characters, as seen in the photograph.

The available lighting equipment has a direct bearing on the creation of the lighting environment. Recent ideas in scenography have demanded more from the stage lightography, and this results in the search for better facilities and equipment.

By introducing stage lightography into the performance, the lighting designer will be able to use the lighting system most effectively without betraying the art.



Kiev National Opera's production of Tchaikovsky's ballet "The Sleeping Beauty". Lighting by Viktor Gozchenko.



Musorgsky's Opera "Khovanschina". Showing a rebellion in the reign of Peter the Great. Lit by Viktor Gozchenko.

LBX™ – A NEW CONSOLE WITH THE TOUCH OF GENIUS™

At the London PLASA show in September 1993, and at LDI in November, the preview of GSX™ - Strand's new entry-level memory lighting console - provided an exclusive look into the future. A future where the lighting control panel is synonymous with the computer keyboard, and the computer-type software packages determine its function.

After all, you don't dispose of a PC and buy a new one when you need to draw as well as type a letter. If you want more from your PC, you add more software. So why shouldn't you do the same with a lighting console? When you want a larger rig, and more dimmers, you can now insert a channel upgrade disk and expand the console to match.

The future is now a reality. The Strand suite of operating software was fully launched in May, consisting of Genius™ v1.1 (including a 25-channel Genius upgrade), Kaleidoscope™, the special effects package, and Communiqué™, with its interconnectivity tools such as MIDI, MSC (Midi Show Control), and remote macros.

The advantage of separate software and hardware platforms is choice. The choice to buy what is needed at an affordable price, but with the flexibility to expand the system in the future. But choice is not restricted to the software. Although plans are already in place for new and exciting software to expand the GSX further, the latest offering in choice is the new LBX™ control console that works with the same software as GSX.

ANNOUNCING LBX

The LBX - a memory plus manual control console - is unashamedly a GSX in concert clothing. The LBX console mirrors the GSX in capacity: from 25 to a maximum of 125 channels, chosen by the selected Genius software version. LBX has an additional feature - manual faders - but this can mean everything to everyone. The universal panacea: manual faders mean hands-on; direct control; two-presets; single preset; submasters. Everyone has a need, and the need differs. So what has been done?

LBX has faders - we've put 96 of them on the desk. And a manual playback with time faders to control them. But what are the faders for? Although they are laid out on the control surface to look like a 48

channel 2-preset desk, the faders can be switched, by the Genius software to be 48 x 2-presets, or 36 x 2-presets with 24 submasters, or 72 x 1-preset and 24 submasters or 96 x 1-preset. The clever part is that if the LBX is set to a single preset configuration, it still works like a 2-preset board, with an intuitive 'hold' function to freeze the channel levels after each fade, so that the state can be re-set using the same faders.

You may well be thinking that if you've bought 125 channel Genius software, any less than 125 channels worth of 2-preset faders is a limitation, but just imagine the size of such a console! Also, with a greater use of colour scrollers, the number of fader-controlled channels reduces. With the flexibility of the LBX and Genius combination, the function of a full-capacity 2-preset desk is condensed into a more manageable sized housing.

SYSTEM CONNECTIVITY

Now, with all the 96 faders being used as channels, what about submasters? This is where the power of interconnectivity begins to show itself. Firstly, install Communiqué software, then by plugging an LX™ manual desk into the analogue port of LBX, 12 faders of the LX control become the LBX's submasters. Still not satisfied? Connect another LBX, or an MX™ into the "DMX-IN" socket™ (yes all these desks are compatible) and the two presets of the auxiliary desk take direct control of either channels or dimmers.

The sturdy engineering-grade injection-moulded LBX case, incorporates a self-adjusting power supply for any mains voltage from 90V to 250V, yet the console is a mere 14kg (30lbs) in weight, making it ideal for touring. But there's more to touring different venues than being tough. The console has to provide an extra level of functionality to accommodate the wide range of shows, the differing situations, the complex rigs, the last minute changes.

PERSONALITY PROGRAMMING

The LBX will work the way you work. What language do you speak? English, German, French, Spanish, Italian, Swedish? Do you like to type in 'channel' @ 'level' and it happens, or do you use a command line sequence with an enter key? Do you like the wheel to work proportionally or to shaft master? Do you prefer cues to track or

crossfade? The choice is yours through the software personality.

You can configure the LBX to match the rig. Which channels are used for scrollers (and therefore mustn't reset when there's a blackout)? Which dimmers are non-dims? Which channels control which dimmers, and at what proportional level?

LBX (with Genius, Kaleidoscope and Communiqué) can operate as the centre of a sophisticated lighting communications network. In addition to the standard equipment such as hand-held designer's control, you can link compatible consoles together through the DMX-In port, or through MIDI. A manual desk can be plugged in and



LBX Lighting Console.



Strand Library.

LBX uses same software and Designer's Remote as GSX.

used for remote submasters, or to trigger macros remotely. A PC computer may be used as an off-line editor or as a master ASCII controller. MIDI may be used

for live control, tracking backup, event control (MIDI Show Control), effects timing; and, of course, you can control the stage lighting!



Strand Library.

GENIUS USERS' GROUP

WELCOME TO THE GENIUS USERS' GROUP

This is the first of what we hope will be a regular column for those of you using consoles operating with Genius, Communiqué and Kaleidoscope software.

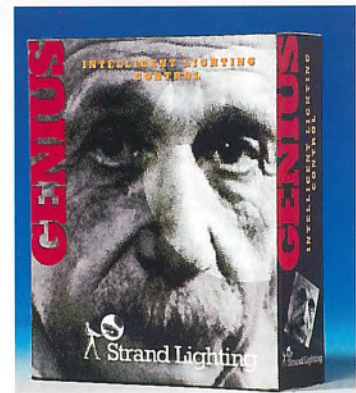
We're starting off with news of the latest software releases, and the exclusive "Genius" T-shirt offer. If you have any comments or questions about Strand software, please write or fax to Andy Collier, at either the Isleworth UK or Los Angeles USA addresses or E-mail at Internet: lights@stranduk.com. Any published comments or ideas will receive a Genius T-shirt.

GENIUS v1.1 RELEASED

One of the great benefits of the disk-based software approach to console design is that software can be added or updated without difficulty. The initial demand for GSX™ consoles was so great that the first shipments were supplied with a basic version of Genius (v1.0). This basic software was more than adequate for lighting a show, but lacked some of the peripheral functions such as macros, effects, designer's handheld remote and help screen.

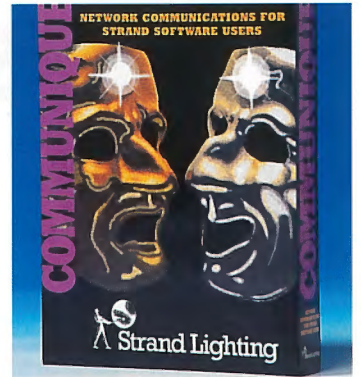
But Genius v1.0 enabled the systems to be set up in Strand for software registration, password generation and supply of the boxed software and manuals.

In May, we announced the full release of Genius v1.1, plus the Kaleidoscope and Communiqué extension software packages, to coincide with the launch of the new LBX™ hardware platform.



Genius™ Foundation Software.

Strand Library.



Communiqué™ Extension Software.

Strand Library.



Kaleidoscope™ Extension Software.

Strand Library.

FREE SOFTWARE UPDATES

Genius v1.1 includes over two hundred improvements, many of which were requested by the first GSX users, which shows that we really do listen to what our customers say! Better still, all registered users of Genius v1.0 automatically received upgrade packs to the new version of Genius free of charge; and the now completed Kaleidoscope and Communiqué are also being delivered.

The Communiqué software package fully supports MSC (Midi Show Control) level 1 implementation, which means that it will work with any show control equipment running MSC. Two recent installations, Seaworld in California and Parliament Hill in Ottawa, both make extensive use of the MSC facilities.

Lights! will have this regular spot to update Genius users on new software products in future, and registered owners will also be mailed direct.

GENIUS USERS' GROUP T-SHIRTS

The latest console accessory - a Genius T-shirt! These good quality black T-shirts are available in M and XL size, and have "GSX" in blue prominently on the chest,

and "Genius at Work" in red on the back. Order details are on the enclosed card or from your local Strand Lighting office.

SUPERVISOR™ DIGITAL DIMMERS

THE SHAPE OF THINGS TO COME

With the launch of a new generation of modular dimming in September, many of the advantages of the top range digital dimming installations will now be available to users a little further down the budget scale.

The Supervisor™ range of dimmers - known as CD80Supervisor™ in North America† and EC90Supervisor™ in the UK and Europe* - form the backbone of the new integrated digital dimming system. Integrated, because no longer are controls and dimmers considered as separate entities in the lighting control network - they are hubs within a sophisticated network of control, communications and feedback.

The Supervisor predecessors, EC90™ and CD90™, set the standard in 1990 with high-performance digital dimming in a modular format, but achieved at a level that put the most desirable features out of range for many users.

The Supervisor now offers the most widely preferred specification points of the top range dimmers - modularity, digital accuracy, status reporting and superb voltage regulation - and has new features such as direct dimmer control without having to use a control system and integrated architectural control. This, added to high level system security and the many in/out control options offered as standard, means that the Supervisor will surely be the bench mark against which every other dimmer will be measured.

STATUS REPORTING

Supervisor dimmers can report their status to a remote Personal Computer running the Strand Reporter™ dimmer supervisory program (available later in 1994). Standard reporting will be of the dimmer line voltage, dimmer output level, failure of either of the two Mux signals, or high temperature / fan failure. Also, as standard, the user can configure and directly control all of the Supervisor dimmers from the remote PC.

For information on load status, the Supervisor range includes the Reporter power modules. These modules measure the current of each dimmer load and report back the load in Watts (and whether this deviates from a stored load value), if the load has been disconnected (either by lamp failure or the spotlight is unplugged), an overload condition, a dimmer fault, a control fault, and if DC is present (eg. if one thyristor of a pair has failed).

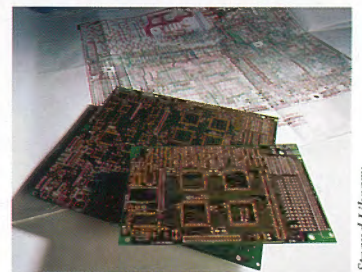
FLEXIBLE CONTROL OPTIONS

Supervisor accepts two simultaneous Mux signals which could be from two separate control systems, eg. "Theatre" and "Rock and Roll" style consoles, "House" and "Visiting" consoles or adding Auditorium or Architectural controls. Up to 32 simple +10V analogue signals enable control from fader desks (such as LX) or from on/off switches.

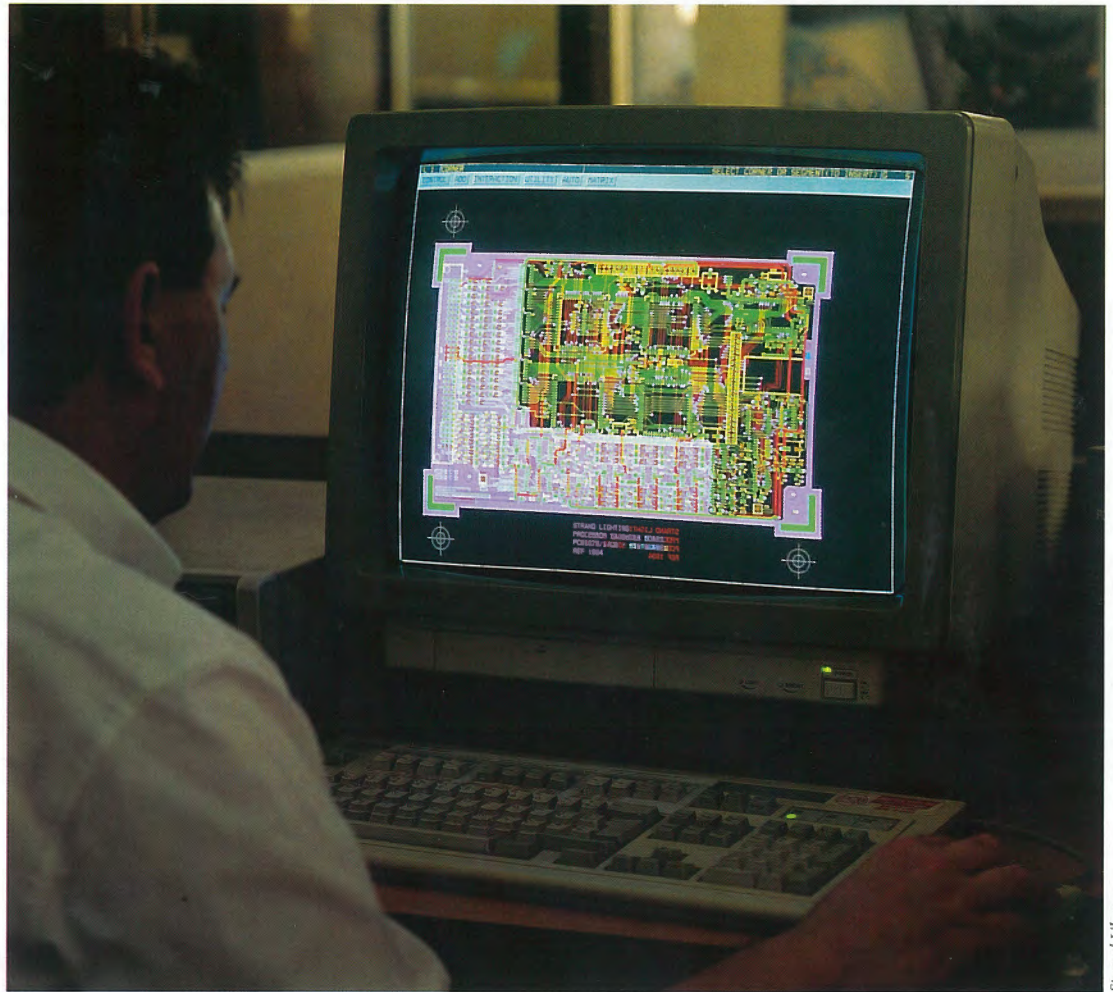
In addition, the SWC™ (System Wide Control) allows direct dimmer and preset control (of up to 99 presets) from a hand held unit and from distributed wall panels. Further, the Supervisor supports an architectural lighting control system called Outlook™. Outlook can control up to 16 rooms each with 8 programmable presets, with stations ranging from simple slider, pushbutton, slider and pushbutton, infra-red and audio visual interface.

The rack's own software then dictates exactly how the five incoming control signals relate to each other and to the dimmer output. These user programmable options have been structured for scenarios where, for example, auditorium lighting, backstage lighting and performance lighting are required to be controlled from one of two main lighting desks, or from distributed push-button outstations or faders. Six combination options allow Mux signals to take precedence, or preset outstations to override, or individual channels to take independent control.

Another clever feature is the 12 analogue signal outputs (available on the large processor version only) that can control non-dimming equipment, such as motors, relays, etc. from any of the above control inputs. This has obviously many uses, like integrating Audio/Visual



The design takes shape.



Designing Supervisor dimmer on CAD for SMT - (see feature page 20).

control, or controlling mirror balls together with a dimmer.

SECURITY FEATURES

A new term to dimming, these features provide security against hardware failure and security for peace of mind.

What happens if things go wrong? A problem on stage, in the auditorium, in a dark corner of a restaurant... and you need light -

now, FAST. Supervisor's "PANIC" (it should really be "don't panic") function immediately drives selected dimmers to full, even without the processor working. This can be activated manually from anywhere in the venue, or automatically, perhaps from a fire alarm system.

There is an option to fit a second processor, running in parallel, and ready to take over in the (unlikely) event that the main processor fails. In many installations, such as live broadcast TV, the added cost is worth the comfort factor of having a complete redundant tracking backup.



Supervisor processor module.

The dimmer setup data, held in each rack's internal memory, can be moved to a replacement processor, either physically, by swapping a PCB, or by storing the data on the Reporter™ PC program and uploading the setup data into the new processor. Even simpler, all data can be transferred from one processor to another directly in dual processor systems.

Should the Mux signals fail, the dimmers can be programmed to hold their current state, or fade to a user-assigned SWC backup preset.

Temperature is carefully controlled in each rack by speed controlled fans, giving the most silent operation possible under all load conditions. If one fan fails, the others will still enable operation for a time, allowing the performance to continue. The CD80Supervisor will warn of approaching overheat condition, and will automatically shut down at 5°C above the warning temperature, while the EC90Supervisor will warn the operator and start shutting down the power modules one by one, according to which are hottest.

The range of Supervisor dimmers complements the top range EC90 and CD90 dimmers, and although the Supervisor programmable features are similar in its American and British guises, there are variations to suit the different safety and Electro-Magnetic (EMC) regulations and different user requirements. The features list below gives a brief overview of what's on offer.

† and other 100/120/240V locations using US specification equipment
* and other 220/240V locations using European specification equipment

EC90 & CD80 SUPERVISOR

- EC90 Supervisor is based on EC90 rack construction, and replaces EC90 MD version.
- CD80 Supervisor is based on CD90 rack construction, and replaces CD80 AE
- Broadcast standard filtering module options to reduce lamp sing
- Hard firing thyristor module options for smoothest dimming performance and ability to run transformer and low wattage loads
- Contactor module options to switch motors, HMI ballasts and other non-dimmable equipment
- All modules available in standard format or with Reporter™ options
- Extensive input control capabilities, ensuring system design flexibility and ability for future system additions and upgrades
- Mux A and Mux B inputs provided as standard with individual patches
- Up to 32 analogue +/- 10V inputs per rack patchable to any dimmer circuit
- 99 System Wide Control (SWC™) memories for additional preset and backup use, using simple "snapshot" recording
- 16 Room by 8 preset Outlook™ architectural lighting presets for auditorium, front of house and other control
- Direct control of channels and presets by hand held remote programmer with specialised riggers functions
- Extensive security features
- Dual electronics processor option for tracking backup
- "Panic" function, to bring up selected dimmers to full
- Line voltage regulation to minimise light output changes when the input voltage fluctuates
- Built-in library of fixed and custom dimmer curves, accessible per dimmer
- Smooth fade processing (approx. 2,000 steps)

Bob Ditzler, of Murphy Lighting Systems, reports for "Lights!" on the Cathedral of the Holy Spirit in Decatur, Georgia.

THE HOLY SPIRIT IN GEORGIA

When the pastors of Atlanta's Cathedral of the Holy Spirit (formerly Chapel Hill Harvester Church) announced plans to build a 7000 seat sanctuary they handed Strand Lighting an interesting challenge. The chance to design a technical system that would become a prototype for the nineties.

To understand why, it is necessary to study the Cathedral and it's goals. The racially-integrated

An average light level of 200fc is achieved with the base instrument package. Fourteen Pollux™ 5k TV Fresnels, for key and fill lighting, hang from one of the two front catwalks which are 90ft from the stage. Twelve Castor™ 2kW TV Fresnels are hung from the three catwalks above the stage for back lighting. In addition, a complement of Pars, Lekos and Scoops are used for colour wall washes, highlighting, specials and congregation supplemental lighting.



The Cathedral of the Holy Spirit in Decatur, Georgia.

congregation filled the old sanctuary three times every Sunday. With religious, musical, and conference activities, the congregation enjoys a diverse combination of worship and the arts. Many projects are international.

The key to the new lighting system was flexibility. The Cathedral needed to accommodate musical styles from Gregorian chants to the classics, from country to contemporary Christian and black gospel. In addition to the music there were plays, services and special events. So both theatrical and television lighting, radically different in style, had to be served to the internationally-known cathedral.

Actually, the system developed three fold; architectural, theatrical and television. The Lightboard™ M console was able to address all dimmers independently. This gave lighting directors the ability to use all the lighting units, regardless of the type of production. The system is capable of supporting 392 - 2.4kW dimmers, 46 - 6kW dimmers and 10 - 12kW dimmers.



The Lightboard M operator has an unrestricted view.

Going into the project, the Cathedral's pastors knew that they would not be able to install everything at once. However, they had the foresight to create an infrastructure to add-on to at a later stage. The distribution is in place. All that needs to be done in the future is to add units as required and assign them a channel.



CZECH THEATRE OPTS FOR STRAND

The town of Ústí nad Labem (Aussig) in the Czech Republic, close to the German border, is not only famous for its historic town centre. The municipal theatre, located in a fabulous mock Baroque building, is renowned far beyond the city boundary, both for its own theatre company and as a venue for touring companies.

The theatre in Ústí nad Labem was built between 1908 and 1909 under the direction of the Viennese architect A. Graf, who was responsible for the construction of other famous theatre buildings such as the opera house in Chemnitz. The Baroque elements which dominate the façade and the auditorium were "borrowed" from other large houses, giving theatre-goers a taste of Viennese operatic flair. Seating over 500 people, the theatre offers an appropriate setting for works by great composers, and the most important chapter in its history began on 30 June 1945 with the premiere of *The Bartered Bride* by Bedřich Smetana.

In successive years the opera company in Ústí has consistently built on its reputation with over a hundred productions of works by many composers, not just ones from the Czech Republic. It is no coincidence that the National Theatre in Prague frequently recruits its new stars from Ústí, and the company's popular tours in other European countries are proof of its quality and wealth of inventiveness. Since 1946 Ústí has had a second string to its artistic bow in the shape of a ballet company, which is also famed throughout the country for its outstanding classical and contemporary repertoire.

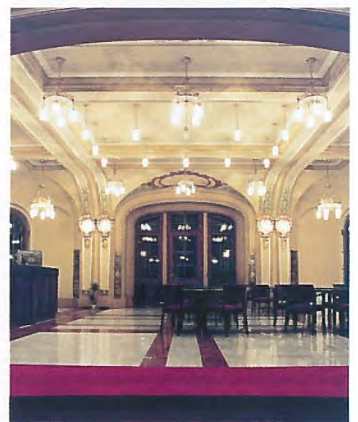
The artistic ambitions of the company have been carried along on Strand equipment for many years. Together with many Strand spotlights, an IDM (the first memory lighting control system ever designed) was in use until a few years ago and never failed at a single performance. Strand was naturally called on again at the time of the technical overhaul in 1993, and today a modern Galaxy™ Nova



Imposing neo-Baroque facade of the theatre in Ústí.



Auditorium ceiling detail.



A grand entrance to a beautiful theatre.

controls the lighting in Ústí. Local dealer Technoart, who managed the project on Strand's behalf, were responsible for a perfect blend of new and existing technology; the Galaxy Nova now controls 240 analogue dimmers of Czech origin. There is an interesting parallel here to the theatre in Chemnitz, which was designed by the same architect, because in recent years a Galaxy lighting control has also been installed there.

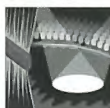
However, it is not just because of its lighting that Ústí is one of the most modern theatres in the Czech Republic; its sound system and stage mechanics also employ the latest technology. Even the video system, with remote control cameras is of the very best. The new technology is integrated almost invisibly into the architecture of the building, so that it is not at all obtrusive. The Galaxy Nova, with its clear and practically-oriented operating philosophy and high level of reliability, was the first choice for the theatre at Ústí from the very outset. And there is even assistance on hand in case of need - Strand has a service centre in Prague with Stastny-Pavlicek, who are experts in Strand control systems and equipment.



The theatre Ústí from the actor's perspective.



Stage setting for Act 3 Dvorak's "Rusalka" by Vladimír A. Srámek.



International hotels are characterised by a high level of comfort, excellent service, and a correspondingly good atmosphere. However, it is no longer mandatory to include a permanent "lightshow" at the expense of all environmental and economic considerations.

A hotel manager casting an eye over his electricity bill a few years ago could only shudder. But what alternative was there? No 'Big Brother' would check all rooms to see if lights were left on, or whether parts of the restaurants, the bars or the conference rooms really needed to be lit. Once they had been switched on, the lights mostly stayed on.

This was good news for power stations and lamp manufacturers, particularly the latter, since this practice had a pronounced effect on the life of their products. But all good things come to an end, and canny designers started to ask why the possibilities offered in theatre or event lighting could not be put to good use architecturally as well, taking into account the particular setting of the building in question. And thus the concept of architectural lighting controls was born.

Professional architectural lighting controls offer the possibility of setting up and storing many different lighting cues, or scenes, individually. This means that the usual, time-honoured "static" style of lighting need no longer dominate in all areas of a hotel.

In the UK, Copthorne Hotels Ltd. decided that it was time to investigate variable lighting for different function areas and at the same time to install facilities such as projection screens and blinds integrated with the lighting control to optimise use of the special events areas in particular.

A few months ago in Hanover, internationally famous for its trade fair, Copthorne opened their first hotel on German soil. Close to the site of the Expo 2000 World Fair there now stands an elegant four-star hotel building belonging to the British chain, which is innovative in its use of internal architectural lighting. Extravagant colours are mixed with British period furniture and modern seating units, set against marble, wood and metal finishes. The technology is also of the very highest quality, with everything controlled electronically.

Copthorne Hotels are one of many German hotel chains who have so far chosen the flexible Premiere™ architectural lighting control system offered by Strand. It was a new departure for the hotel company in that the entire building (with the exception of the bedrooms, of course) was to be controlled as one - the foyer, the restaurant, the corridors, the bars and the English pub as well as the conference and function rooms. Two central computers are used to do this, with 24 decentralised outstations on a data network. Data

COPTHORNE PREMIERES IN GERMANY

from the local controls go to the central processor and from there to the eight LD90™ dimmer racks which control the 238 channels in the building.

With the help of a PC, the programmable control system can in theory be adapted to any conceivable lighting situation by the hotel's technical manager Thomas Wehr. This means he can not only control the screens and blinds mentioned above but also manage complex functions like the combination of a number of rooms into one. "One of the advantages of

this system for us, apart from the reduced energy costs, is that we need involve far fewer technical staff. A hotel guest can soon learn to use the presets and then press the button himself to dim the lights, bring down the projection screens and darken the room with the blinds", according to Wehr.

In order to make the use of presets in the Copthorne Hotel straightforward, not only for the guests using the conference facilities, but also for the staff, all the outstations are identical. The only exception is the foyer. Here there is



The main foyer.

a large LCD display on which the operator can see the name of the lighting scene selected. Up to 128 scenes can be identified by name and called up at the touch of a button. Thomas Wehr believes that, "the system offers great flexibility and the concept has been very well designed."

Compared with the complex refinements offered by such an architectural lighting system, installing it is relatively straightforward. At least, Jörg Lendeckel of the contractors Landwehr and Schulz in Heiligenstadt had no problems at all. "Although it was the first time we had installed a Premiere system, thanks to the excellent support by Strand, we managed it without difficulty. The system and the plans of it are so easy to understand that the installation is almost child's play," said Lendeckel.

The Copthorne Hotel Hanover is the first in the chain (Stuttgart will be the second, following shortly) to have a Premiere system. It is also the first in which the architectural lighting control system controls almost everything. However, other "Premiere" hotels including the Radisson Plaza and the Interconti in Berlin are similar in that the screens and blinds have been integrated with the lighting control.

In the "Trigon" conference section of the Interconti in Berlin alone there are 16 LCD outstations, four pushbutton outstations (each with eight buttons) and 2 fader outstations, distributed once again over 2 Premiere processors. Apart from the design of the system itself, the technical events manager Thomas Schliebe particularly appreciates the Premiere's ability to combine function rooms. The system here has been integrated into a complete PC network which is the platform for the integration of audio/video equipment, via a digital patch field, including the existing chain hoist suspension system and of course the architectural lighting control. In practice this means that the user can take his PC and programme directly in situ in the function room, for example, which increases the flexibility of the system even more.



The exterior of The Copthorne Hotel, Hannover.



One of the Meeting Rooms



The Copthorne's bar and buffet area.



LATEST MANUFACTURING TECHNOLOGY FOR KIRKCALDY

Alongside the A92 in Fife, Scotland, stands a 25 ft tall man, banging a gong. He is one of the first things people see when they arrive at Strand Lighting's huge 130,000sq ft Kirkcaldy factory set in 42 acres of park land. The size is just one of the surprising things, another is the diversity of operations that are carried out in the plant including: computer numerically controlled (CNC) presswork, cable and harness assembly, silk screening, electronic and electro-mechanical assembly and test, powder coat painting and luminaire R&D.

Through the glass wall of the reception area visitors can see a recent investment. A PCB assembly area containing the latest fully automated equipment for surface mount placement and conventional "through hole" insertion of components for printed circuit boards. The machine can place up to 400 components onto a PCB in around five minutes and produces upwards of 50,000 boards per annum!

THE BENEFITS OF SMT

Many of Strand's newest electronic products (the GSX, LBX, LD90 and EC90/CD80 Supervisor processors and Digital Environ - DE90) include surface mount technology (SMT) PCBs. This technology involves minute leadless components being pasted onto the surface of the PCB by a robotic system, and when the board is

subjected to the latest in convection re-flow heating, the pre-soldered tracks fuse with the component connections. Surface mount technology not only permits a higher density and thus more compact printed circuit board to be designed, but also significantly increases the reliability of the finished product.

As part of the recent updating of the Kirkcaldy production facilities a £300,000 extension to the electro-static paint plant has been added. This consists of two continuous conveyor lines allowing two different colours to be sprayed simultaneously. For example, black Coda castings on one line, and grey LD90 front panels on the other.

The bare metal components are hooked onto the line and initially pass through a three stage chemical etching and cleaning process, the spray of which is so dense, you cannot see from one end of the facility to the other. It is then dried before moving on to the electro-static powder coating area where the paint is attracted to the metal using a high electric charge. This results in a very smooth and even finish, which is then baked onto the metal.

If required, once it has cooled, it can proceed to the silk-screen area where over 100 different types of legends can be affixed. Not all components can be painted using the electro-static process, so there are additional wet paint spray booths for the more difficult or sensitive items.



Part of the new electrostatic paint plant with the PCB facility (inset).

INVESTING IN QUALITY AND PEOPLE

Overall, £ 3.5M has been invested in recent years in developing a major, modern manufacturing facility in Strand's Scottish plant. Total quality is the ultimate objective, not just in product terms, but in every aspect of the business. The factory have BS5750 Part 1, (ISO9001) the highest quality accreditation under their belt and are continually seeking to improve administrative and production procedures.

However, according to Neil Gilmour, Director of European Operations, the most valuable weapon in the Kirkcaldy armoury is its multi-skilled, highly flexible workforce of which he is justly proud. "The attitude and commitment of our workforce is quite simply excellent" says Gilmour "They are prepared to do whatever is necessary to satisfy our customers needs, what else would you expect from a workforce with over 1500 years of experience between them building Strand products?".

BE LIGHT WISE IN '94

The Association of Lighting Designers (ALD) was formed in the UK in 1963 by the six leading names in the profession at that time; Joe Davis, Richard Pilbrow, Michael Northen, Bill Bundy, John Wykham and Charles Bristow.

The current recognition of the creative importance of the lighting designer in both the theatre and commercial environments is probably largely ascribable to the ALD. But the role of the ALD has not simply been about achieving recognition for the lighting designer, it is very much an active organisation with responsibilities to end users of lighting design as well as to the designers themselves. The ALD is also actively involved with advancements and ideas that affect all aspects of lighting.

Membership of the ALD spans all areas of lighting design, architectural, theatrical, television, film, special effects, lighting product designers and educationalists in the

field. There is also a large student membership, a healthy Associate membership amongst people who are indirectly involved in the profession, and a growing international member base.

Chris Watts has just been elected Secretary of the ALD and is excited about the continuing role and revitalised importance of the Association. Chris' extensive direct experience on both sides of the Atlantic as a lighting designer for theatrical productions and as a member of the project design team with Theatre Projects Consultants (he has recently assisted Allen Russell on the new house lighting system for the Chichester Festival Theatre) puts him in a good position to understand exactly what is needed by members of the ALD and what still needs to be done to communicate the message of the Association to end users. "Lighting is an art form which is used by people on a day to day basis but is still underrated and misunderstood" he explains. "The ALD is a respected mouthpiece for lighting designers which can help both the users of

lighting and practitioners in the field to achieve better results."

The year ahead is promising innovations including the publication of the first yearbook with names, contact numbers and useful information about the Association and moves to become more widely known through



Chichester Festival Theatre

a presence at the PLASA and ABTT shows.

The ALD has an Executive of ten who meet every six weeks and reaches its members through a monthly newsletter *Focus* and a programme of varied events, visits and talks by what might be termed leading lights in the industry. Chris is keen to encourage a dialogue between the Executive of the ALD and its members to ensure that each sector of the industry is well represented and their concerns are aired.

Wherever you are, if you are interested in lighting, why not join the ALD this year and become more involved in the lighting art? For more information about becoming an ALD member, contact Chris Watts at the ALD office +44 (0)71 482 4224, or use the attached reader reply card.

Under the very active leadership of Chairman Michael Northen and with the enthusiastic day to day input of Chris Watts, the ALD is set to enter a new era - the results will be illuminating.

ALD#

V I D E O L U X TM

INTRODUCING... THE LOW ENERGY STUDIO

The explosion in television around the world is making huge demands for broadcast programme material. This is happening in all areas of television from first level public broadcasting facilities in emerging countries through to the proliferating private TV channels in the developed world.

This demand is inevitably putting pressure on production costs and in turn has caused the television industry to consider fluorescent lighting as a prime source of illumination. The high Lumens per Watt ratio of these light sources means low power

have required a large number of units to give adequate lighting levels for old Plumbicon tube television cameras.

NEW FLUORESCENT DEVELOPMENT

The comparatively recent development of commercially available high colour rendering index fluorescent tubes and high frequency electronic ballasts can now be coupled with recent improvements in TV/Video camera sensitivity to make these sources very practical for a number of general television lighting applications.

TV industry as well as easing economic pressures.

The heart of this Low Energy Studio concept is the new range of VideoLuxTM fluorescent softlights.

LOW ENERGY STUDIO RIG

Designed around 6 x 36W and 2 x 36W Compact Fluorescent lamps (with a high colour rendering index) which are mounted horizontally in efficient reflector assemblies, these new softlights give a very smooth wide spread. This spread can be concentrated by fitting an intensifier accessory to collect the light from the edge of the beam and redirect it

The intensifier accessories will improve this situation, and in the hands of an experienced lighting designer VideoLux fixtures can be used unassisted to give an excellent picture.

There is no doubt, however, that the best approach to low energy lighting is to use VideoLux fixtures to create a base level of light which will be acceptable for today's highly sensitive studio cameras and then to build on that with a limited number of low wattage Fresnels such as the 300/500W MizarTM or BambinoTM with 650W lamps. The colour temperature and colour rendering of the standard lamps allow very successful mixing with tungsten sources whilst the 'daylight' lamps can be mixed equally successfully with HMI sources.

This type of lighting is particularly suitable for smaller TV studios, where the lighting positions can be close to the performers who will be able to work comfortably without problems of glare or heat. A fixed studio lighting installation is often adequate but where sets could be changed regularly to accommodate, for instance, larger group discussions or large props and displays, then flexibility to reposition luminaires is essential. This is where Strand's studio suspension experience and product range comes into its own. For example, the new LightScopeTM will enable full vertical adjustment, and the LightRigTM rolling track suspension system provides complete flexibility in horizontal luminaire positioning.

The final link in the Low Energy System from Strand is the provision of flexible intensity control for any installation. VideoLux is provided in a number of versions which will all be dimmable. Whether the luminaires are to be added to an existing studio with existing dimmer outlets or used in a new studio without dimmers, Strand through its unparalleled experience in this area, will be able to provide an answer to suit all needs.

So, don't think of this as just another lighting fixture. VideoLux is part of a system from Strand, solving the twin problems of low energy requirements and comfortable studio working conditions.



Strand's new Videolux 216 (left) and Videolux 72 - the heart of the low energy studio.

consumption and consequently low heat generation. This in turn requires lower capital costs for air conditioning plant and lower running cost.

Fluorescent sources have been used in television in the past but with limited success and normally for specialist applications. Their biggest problem has been a green caste and "flicker" on screen and

Strand has brought its considerable worldwide experience in TV Studio planning and installation to not only offer new lights based on fluorescent sources but to combine them with other low power conventional lights, dimming, control and suspension to offer a very flexible low energy lighting system, which addresses both the artistic and operational needs of the

towards the centre. The easy-fit intensifier accessory will also accept an 'eggcrate' attachment which further controls the direction of the light.

Being a large illuminating source compared with tungsten halogen powered Fresnels, it is inevitable that these luminaires are going to produce a soft lighting style or look with only limited modelling.

Strand Library

HSN - SHOPPING FROM HOME

Little did anyone know in 1982 how the ideas of a sell-by-air radio station in Clearwater, Florida would develop on TV. Today, using every television technique in the book, Home Shopping Network has become as much a part of the American way of life as Mom, apple-pie and the 11 o'clock news.

The broadcasting complex, in St Petersburg, Florida, is a modern electronic marvel. In fact it seems likely that the only non-automated things moving are the alligators. They have taken up residence in the swamp, by the satellite dishes. They seem to like it there, and American viewers seem to like Home Shopping Network. In 1993, five million people spent well in excess of \$1 billion on a wide range of products, from King James' Bibles, to cufflinks, camcorders and feather dusters.

STRAND LIGHTS HSN STUDIO

Three program services broadcast 24-hours a day, utilising seven studios equipped with CD80™ AE dimming, either Lightpalette™ 90, mini Lightpalette 90, or Mantrix™ MX control, and studio luminaires from Strand Lighting, supplied by Murphy Lighting Systems.

A team of presenters, with the looks and aplomb of their network counterparts, "host" 3-hour "shows". Except that the show is an on-going commercial, a sales pitch for all kinds of products. Standing by in support of the host are 2000 operators and a telephone system that could handle a city of 35,000 people. A nation-wide network of warehouses stands ready to ship orders. Sometimes a warehouse will handle over 30,000 packages a day.

HSN recognised and blended two popular American pastimes, shopping, and watching TV. It is a very high dollar-volume merger. In an average three hour stint a host will sell at a rate of several thousand dollars per minute. Monitors show the host how many calls are stacked up, and how many items have been sold. If the totals do not look encouraging the host will move on to another item. Many of the callers get to talk to the host. In this way interest can also be measured. But most of the broadcasters have that "sixth sense" that recognizes the product's viewer appeal.

Because of the vast purchasing power of HSN some products are price reduced on-screen. This whips up enthusiasm among viewers. Shoppers telephone their friends urging them to switch on so as not to miss a bargain.

STARS SELL THE GOODS

These buyers get involved with the presenters and their "shows" rather like the fans of soap operas. Some watchers admit to feeling that they are watching "family" when they switch on. Often stars of TV as well as show business personalities join HSN hosts to praise the merits



Shari Belafonte with Show Host Mindy McCortney in the HSN set and Arturo Softlight.



Just one of the order department areas at Clearwater.



An HSN Production Studio generously rigged with Quartzcolor fixtures.



Satellite dishes that beam the network nation-wide on a twenty-four hour basis.

of the product. Omar Sharif, Shari Belafonte, and Ivana Trump, to name a few.

Branded and private label products are featured, with new product constantly introduced. All will have been carefully tested before they are offered for sale. Occasionally "close-out" bargains are featured. But one thing is very certain, they will sell, or be replaced by those that do. The networks, one for cable, one direct, and one low power/overnight, that conventional TV stations can opt into, will make sure of that. In millions of homes the audience is captivated, and 82% of them are women. Many will have stumbled on the channel by accident. They see a series of products paraded by a host, and a toll-free number. It is impulse-driven television that goes on and on, and it can be very strange. A jewellery item is moving slowly so the host switches to the King James Bible. In a style reminiscent of old time preaching, he proceeds to sell 1,700 copies at \$7.75 each, in just 11 minutes. Including shipping and handling charges that is just over \$20,000.

To help the viewer HSN issues its own credit cards, as well as accepting major credit cards. The network modestly claims to be a marriage broker. One lady bought so much that she ended up marrying her UPS delivery man. "He delivered so many packages that I guess they got to know each other rather well!" said an HSN spokesperson.

STRAND SELECTED FOR RELIABILITY

An elaborate power back-up system ensures that HSN does not go off the air. Even a few minutes stoppage would prove very costly. But that will not happen. Home Shopping Network, lit by Strand Lighting, is striding confidently towards the 21st Century. At St Petersburg the pace is fast and furious. No-one is slumbering, except maybe the alligators that live in the swamp by the satellite dish!

MURPHY LIGHTING SYSTEMS

Murphy Lighting Systems has been responsible for equipping the studios of the giant Home Shopping Network at Clearwater, Florida.

With offices located in Atlanta, Georgia, and Gainesville and Orlando, Florida, Murphy Lighting Systems have been associated with Strand Lighting for over fifteen years. During that time they have grown to become the Strand specialists for the South-Eastern United States.

THERE'S MORE THAN ONE WAY TO HANG A LIGHT

Amongst the growing number of recent Strand success stories a high spot must be the addition of TV studio suspension to the already extensive armoury of Strand Lighting products.

Being able to reposition luminaires quickly and safely is essential if expensive down time is to be avoided in busy production studios. Whether it is bringing the luminaire down for re-lamping, moving it out of the way for scenery changes or repositioning for a new shot, Strand's expanding range of suspension products are designed to facilitate this in studios of all sizes and handling all types of TV, Video and Film production. Recent additions to the range include:

LIGHTSCOPE™

LightScope is a compact spring-balanced telescoping hanging device which allows lights to be positioned vertically without the need of ladders or access towers. It comprises an assembly of interlocking telescopic aluminium tubes to give vertical travel whilst retaining steady rotational positioning of the luminaire fixed to it.

Using a similar principle to spring-balanced pantographs, torsion springs counteract the weight of the luminaire such that it can be pulled down to its required height on the Lightscope and it will stay in position. Adjustment can be made for the weight of the luminaire, and LightScopes are available in both standard and heavy



LightScope.

duty models (for luminaires weighing 4.5kg - 9kg or 9kg - 18kg) and in two different height versions (2.2m or 3.4m extended lengths).

In the smaller studio, LightScopes can be added to provide extra flexibility to basic fixed pipe grid installations and in conjunction with Strand's Rolling Trolleys, lateral positioning flexibility can be provided in addition. LightScopes can also be planned into more sophisticated rigging installations to give even more versatility.



SuperRig.

SUPER RIG™

SuperRig takes the traditional fixed pipe grid system of luminaire mounting but brings to it a new degree of freedom by allowing either pipes or extruded aluminium cross rails to slide anywhere along the length of a fixed structure of heavy duty rolled steel rails.

Lighting fixtures or other equipment can be hung from these cross pipes or rails by means of a range of attachments providing either fixed positioning, lateral adjustment along the cross pipe or rail, vertical positioning by means of Strand's range of single point suspension products or a combination of all.

SuperRig includes:

- Primary Rail fixings
A comprehensive range of components designed to enable the SuperRig to be installed into most studio building situations.
- Rails and Barrels
Cross rails of SuperRig and industry-standard tubular barrels for suspension from parallel primary SuperRig track

- Trolleys
A range of single and articulated trolleys allow cross rails, barrels, single point suspension devices and luminaires to traverse along SuperRig tracks.

SuperRig can therefore be specified to provide a totally flexible installation for equipment positioning to satisfy the Lighting Designer and Floor Manager as well as giving excellent access for maintenance to please the studio crew. Combined with Strand's range of Pole Operated studio lighting fixtures all of this flexibility can be controlled from the studio floor.

Strand's rigging and suspension ranges can now answer most needs from the straight forward requirement for which standard packages of equipment are available through to the very much tailor-made project with which Strand has considerable experience in installations around the world. There is one thing for certain, in this very important area, Strand's designers will be working closely with users to ensure its products are on top.

In July 1993, Strand Lighting received the order to equip three new studios in Wharf Cable TV's new headquarters in Tsuen Wan, the largest digital broadcast facility in the world.

WHARF CABLE TV - HONG KONG

Everyone knows that space is at a premium in Hong Kong, and Wharf TV's answer was to build two of its three new studio facilities on the 7th floor of a 40 storey office building.

Here, studios 6 and 7 occupy a space of 45m x 20m (145ft x 65ft), but the problem for the design team was the limited height of 4.4m (14ft) and a number of structural columns throughout the area. The studios are divided into 9 zones, each being the production area for a different cable channel, for example Sports, Youth Music and a children's channel.

But these studios aren't just studios. In addition to being a production area, this space is also an open-plan office. The solution to the rigging problems, with a low ceiling height was simple - Strand's LightRig - as this track and trolley system allowed the greatest degree

of flexibility of use, combined with fast installation and was suitable for the restricted height. The project required 600m of LightRig™, making it the largest single installation anywhere in the world.

Luminaires are fed from a total of 120 EC90™ MD 16Amp dimmers which are located in two dimmer rooms, one at each end of the building. The control system had to allow lighting in any area to be controlled and memorised from any of up to four control rooms and to enable local control by area without any interaction.

The Strand Premiere™ architectural control was selected for the job as it allows up to 32 separate "rooms" (or studios in this application), each with up to 128 presets. Wharf Cable TV opted to have portable versions of the 15 fader control stations, each with 8 presets, to enable control units to be



Studio 4 - Wharf Cable TV.

used in any of the control rooms and also to be plugged into the various areas within Studio 6 & 7. Smart jacks take care of all of the control routing for the Lighting Designers within the Studios.

The Control Room routing is selected on 16 way push button stations by the Premiere processor unit located in the Central Apparatus Room, with possibly the world's shortest C-LAN network, having 5 stations within 1 metre!

The third facility is more of a conventional studio. Studio 4 is 110 square metres (1,160 sq. ft) and fitted with Strand's LightRig suspension and cyclorama tracks.

Strand Quartzcolor luminaires, 60 ways of EC90 MD 16Amp plug-in Dimmers and an M24 memory console are also installed.

John Bowers, Project Manager (Production Facilities), says, "The Strand design and installation gave us the flexibility that we needed as production requirements changed as installation was taking place. The total system was well able to cope with all our alterations. It is ideal."

Bentley Miller, Lighting Consultant, commented "Both the LightRig, because it can be repositioned easily from the ground, and the control systems especially Studios 6 & 7 are absolutely the best for this operation."

Strand handed over Studio 6 & 7 in September 1993 and Studio 4 early in October, four weeks before Wharf went 'On Air' with 8 channels, 24 hours a day. Vic Gibbs of Strand Lighting Asia undertook the design, supply and installation of the mechanical and electrical work for the production lighting, and even ended up installing Audio and Video Monitor and Camera brackets in other studios and control rooms.



The last issue of "Lights!" announced a new generation of dual lamp option HMI Parlights - SuperQuasar. Following on from the success of these two new location lights - two additions to the Quartzcolor HMI location range...

THE NEW SUPERNOVA™ HMI FRESNELS

Strand Lighting, through its partnership with the Quartzcolor factory in Rome, was one of the pioneers of HMI lighting for Film and Television back in the early 1970's. The current range of HMI lights includes eight Sirio Fresnels from 575W right through to 18kW, three Sirio™ Twin Fresnels from 575W to 2500W, three Quasar™ and SuperQuasar™ Parlights from 1200W to 4000W and a range of three Arturo™ HMI Softlights from 575W to 2500W.

During the introduction of the new single-ended HMI lamp technology (pioneered by Philips with their MSR lamps) there was a lot of doubt in the industry over the reliability of this type of lamp construction. Strand looked back to its Altair HMI/CID concept developed at the time of uncertainty between the future of HMI lamps versus the single ended CID lamps. The old Altair gave users the option of fitting either HMI or CID lamp and the Sirio Twins were introduced to provide a similar option of fitting the new single ended HMI lamps, or when these were not available, to fit the readily available double-ended HMI. This was certainly a useful feature in those early days when lamp supplies were still being developed globally.

Lamp manufacturers have worked hard on their new technology and production processes to ensure the reliability of their single-ended lamps. Strand is now launching the first in its new range of Fresnels designed specifically for single-ended lamps.

Some time ago, the Quartzcolor factory had manufactured the superbly built "Nova" carbon arc fresnel. What better pedigree could there be for these new stablemates to the SuperQuasar single ended HMI parlights? So two bright new stars have been born - the SuperNova™ 4000W and 2500W single ended HMI Fresnels.

COMPACT "NEW" STARS FOR SINGLE-ENDED DAYLIGHT LAMPS

SuperNova 40/25 is designed around the 4000W single-ended lamp but is equivalent in size to previous 2500W models and SuperNova 25 has been designed around the 2500W single-ended lamp and is equivalent in size to previous 1200W Fresnels. This reduction in size has been achieved by the use of more compact single-ended lamp format and the introduction of a completely new, compact, silent ignitor allowing the overall height to be kept to a minimum.



Computer rendition of SuperNova 40/25 used to visualise the prototype.

Our designers have been keen to make these new products as easy as possible to use by gaffers whilst providing the best possible optical performance to please DP's and Lighting Directors.

Focus control is by means of a rack and pinion mechanism through a single rotation operating knob on the side; conveniently placed to be close to the tilt lock knob. The pivot position of the luminaire has been carefully chosen to be on its centre of gravity when barndoors are fitted. In this way gorilla strength isn't

needed to lock the head in position!

Barndoors are now fitted in simple but durable cast aluminium drop-in ears but with roller bearings to ensure ease of rotation; input cables have been separated from the head to reduce all-up weight when rigging, and SuperNovas use the same quick release lampholder developed for SuperQuasar for ease of lamp changing.

SuperNova 40/25 has a similar 4000W/2500W dual lamp capability as its SuperQuasar equivalent.

By loosening two securing screws the lampholder can be raised from its normal position for the 4000W lamp to an alternative position enabling a 2500W lamp to be fitted. This model doubles as a compact 4000W or a normal 2500W HMI fresnel.

A new livery distinguishes this new generation of HMI fresnel and they are expected to be available as this issue of *Lights!* goes to press.



STARTING FROM THE TOP WITH BILL LEE



Bill Lee hard at work with his students.

If you really want to learn the best way to do something, you consult an expert. This is just what a party of budding lighting directors and cameramen did when they

attended Bill Lee's Lighting Workshop at Strand Lighting's studio in Isleworth in May.

Bill, with many years experience in lighting for television, video, and film, has

numerous credits to his name including *Birds of a Feather* (SelecTV/BBC) and *Fifteen to One* (William Stuart Productions/Channel Four).

After an introduction by a Sony

engineer on the mysteries of video cameras, Bill introduced the group to the effect that light can have on a simple solid object. As if by magic, he was able to merge the object into the background just by adjusting the position and the intensity of the lights used.

He went on to show when, where, and how to use light to achieve the results you require to produce a good television or video programme. Some of the party were from a college in Belgium and had only ever used Redheads™. They became very excited and quite imaginative when it came to lighting their own exercises, using many of the different luminaires available and in some very unusual positions!

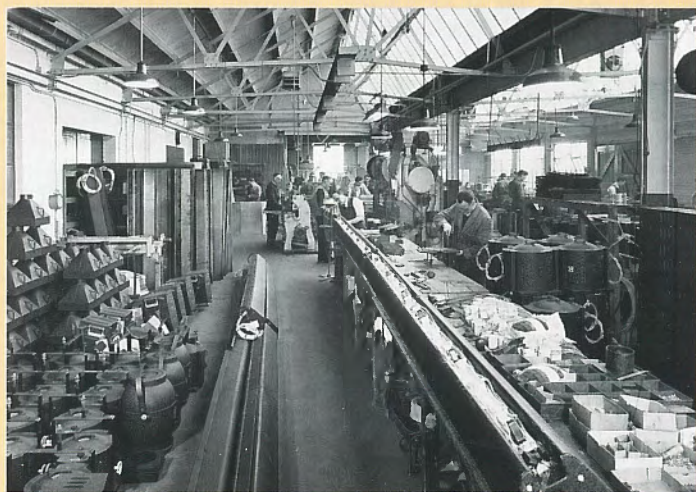
It was a very busy two days but the group thoroughly enjoyed themselves and learned a great deal. It just goes to show, if you want the best, go to the top. *LS*

Bill Lee is conducting further courses in the Strand Demonstration Theatre and Visitor Centre. For details, and prices of inclusive tuition and accommodation packages, call Richard Bunting on 081-560 3171.

Strand Library

FROM THE PHOTO ARCHIVES

"Lights!" readers might like to compare these archive shots with the show room picture in the last issue and the pictures of the Kirkcaldy factory on page 20. How things have changed!



FREE ENTRY TO LDI SHOW FOR LIGHTS! READERS

LDI94, scheduled for Reno, USA, November 18, 19 and 20th has become a major event in the lighting calendar - a must for all exponents of creative lighting.

Lights! is pleased to announce that show organisers, Lighting Dimensions International, have offered complimentary entry to the exhibition area to all overseas-based* Lights! readers who register with them by October 10th. The exhibition is

being held at the Reno/Sparks Convention Center, Reno, Nevada and will include lighting equipment for entertainment and architectural applications and pro-audio gear for stage and studio, clubs and concerts.

Accompanying the exhibition is a comprehensive seminar programme - The "LDI94 Workshop Tracks". Key themes of the workshops are, 'Lighting Design & Production Techniques', 'Sound in Entertainment', 'Light in Architecture' and 'Themed

Environments'. The lighting topics are extensive and varied, with leading experts assembled to cover a diversity of lighting challenges from theme parks to TV sitcoms and rock to restaurants, plus technology updates and hands on tutorials.

Please mail the enclosed registration card for complimentary exhibition pass.

* Offer does not apply to "Lights!" readers resident in the USA or Canada.

Full details of LDI94, full conference and workshop registration prices are available from:-

LDI94
 TEL +212 229 2965 or
 FAX +212 229 2084
 32 West 18th Street,
 New York,
 NY 10011-4612, USA.

1994 SPRING COLLECTION



Pictured are (Left) David Cusworth (UK Field Sales Manager) and Ivan Myles (European Distributor Sales Manager) at the Stage Lighting Centre - Dublin, Strand's Eire Distributor

With so many new and exciting products introduced each year, telling our customers about them is no mean task. Exhibitions provides an important opportunity to communicate, and this year Strand is attending 22 exhibitions and trade shows* world-wide, of which 6 are in the UK. But noisy bustling exhibition stands are not conducive to learning about the finer points of the most advanced lighting control technology.

Strand's UK Field Sales Manager, David Cusworth told *Lights!* that "We were really looking for a break with tradition, an opportunity to present significant products in far greater detail, to a larger audience, than is usually possible at an exhibition".

So in March, David and his team hit the road with the "1994 Spring Collection" bringing the latest theatrical, architectural and studio

products to an invited audience hosted by the Strand Distributors around the UK.

The format chosen included three scheduled 45 minute presentations a day, with the theme of the 'Strand Digital Theatre'. Products included an update on the LD90™ Digital Dimmer with System Wide Control™ and Outlook™, the new GSX™ console with its innovative software packages Genius™, Kaleidoscope™ and Communiqué™, ACT6+™ and the new Leko®.

"We visited 14 Distributors on the tour, and presented to over 1400 people ranging from contractors to theatre consultants - it was very beneficial for all concerned. To illustrate the pace at which products appear, half way through the tour a new console called LBX was announced (see feature page 14-15) so we took it with us on the remainder of the tour!"

STREAMLINING SERVICES TO FRANCE

For over two months now customers in France will have benefited from Strand's move to direct distribution through our specialist French distributors.

Our distributors in France - Eclalux, Panatechnic and Z Professionnel - offer specialist skills and services to meet local needs, while enjoying the technical support and experience of the wider Strand organisation. Based in Paris, Marseilles and Bordeaux respectively, these distributors supply the local customer support which continues to be a key part of Strand's philosophy of expanding the partnership

between manufacturer and supplier.

As links with Britain's nearest neighbour are strengthened through common membership of the European trading community and land connection by the Channel Tunnel, Strand has taken the opportunity to integrate direct deliveries to distributors within our logistics programme. A direct telephone line with French speaking customer services support within the Isleworth sales operation is available for our French dealers and customers. In view of these changes the Strand office previously based in Paris has been closed.

STRAND'S 80TH CELEBRATED IN "LIGHTING AND SOUND INTERNATIONAL"

Regular readers of *Lighting and Sound International* could not have failed to notice the special feature celebrating Strand's 80 years in the business. The May 1994 edition of the magazine turned its front cover over to a specially-commissioned colour reproduction of the Golden Jubilee TABS of thirty years before. The image, originally created for the first edition of *TABS* in 1937, is reproduced again on the front cover of this edition of *Lights!*

Strand's 16-page feature article included interviews with Managing Director Chris Waldron and members of the UK trading company, comments from a selection of Strand's extensive European distributorship, and details of some recent projects. If you missed this important feature edition, please contact *Lighting and Sound International*



Lighting and Sound International. Strand's 80 years.

on 0323 642639 for subscription details. A reprint of the feature is also available direct from Strand - see the reply card again for details.

STRAND'S NEW INTERNATIONAL CATALOGUE

A little over a year since *The Strand Catalogue* made its UK debut in a new direct mail format, a new edition, launched in May, extended the readership worldwide.

In addition to Strand's own generic English language version, many Main Distributors joined the promotional scheme to have their own customised copies printed.

In America, *The Strand Catalog*, released in November last year, ran to 100,000 copies with USA, Canadian and Latin American

editions. This latest UK edition takes the combined global print run to well in excess of a quarter of a million copies.

The new *Strand Catalogue* includes more pages and more products than before. Over twenty new products are described, covering all applications of lighting; theatre and location spotlights, controls, software, digital dimmers, suspension equipment and architectural controls and dimmers.

We made a commitment that nobody in the entertainment and architectural lighting field would fail to have a copy of *The Strand Catalogue*. To this end, they are being distributed through magazine inserts, by direct mail, through contact with a Main Distributor, and at exhibitions. If you don't have a catalogue, let us know; if you find yourself with more than one copy, please pass it on!



MILESTONES

IN LIGHTING HISTORY

1951

Royal Festival Hall, London - the only permanent building to remain from the 'Festival of Britain', was equipped by Strand with a Light Console, and a complete lighting installation including long-range colour change spots. This led to the request for a 'duplicate' installation in Venezuela - at the Aula Magna in Caracas.

1952

Strand's first branch office in Australia: 481 Malvern Road, South Yarra was the address and Alec Brown, ex chief of the London Coliseum, was the boss, with a small group of the crew from an Australian tour of "Oklahoma!" which he had master-minded prior to the Strand opportunity.



Pattern 23 with the 'new' book clamp.

Strand Archive.

1953

The most famous number in Stage Lighting - the Patt 23 is born. Strand's first die-cast aluminium stage lantern. Easily the most popular single unit ever produced by Strand Electric in the UK, with over half a million sold until production ceased in 1983.

1954

Strand's King Street Demonstration Theatre re-opened, where it became the Mecca for stage lighting demonstrations and lectures until 1977.

1955

Gerd Ohlmer, a travelling salesman for Dieder. Buschmann of Brunswick (his family's pharmaceutical company) wrote to Strand with an interest in selling colour filters to opera and ballet companies. By the end of the year he had established an official branch - Strand Electric-Hessenbruch.

Also in 1955, the last Light Console was manufactured - for Theatre Polski in Warsaw.

1959

Strand starts up in Canada (see Philip Rose's article on page 8). In the UK the smallest and best event in the history of Stage Lighting: Strand launches the hook clamp and frees the theatre from the old 2 nut and 2 bolt L-clamp. A little more high-tech was the demonstration of the prototype thyristor dimmer and a punched card 'memory' system (KTV or "Klonk") to the Society of TV Lighting Directors at the King Street Demonstration Theatre. ♪

STRAND LIGHTING OFFICES

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Rancho Dominguez, CA 90221, USA, Tel: 310 637 7500, Fax: 310 632 5519,
Toll Free Tel: 800 487 0175, Toll Free Fax: 800 775 LEKO.

Strand Lighting, 2430 Lucknow Dr. # 15, Mississauga,
Ontario, Canada, L5S 1V3, Tel: 905 677 7130, Fax: 905 677 6859.

Strand Lighting Asia Limited, 7/F Corporation Square,
8 Lam Lok Street, Kowloon Bay, Hong Kong,
Tel: (852) 757 3033, Fax: (852) 757 1767.

Rank Lighting S.r.l., Via delle Gardenie 33, 00040 Pomezia,
Roma, Italy, Tel: 06 914 7123, Fax: 06 914 7136.

Strand Lighting GmbH, Salzbergstrasse 2, 38302 Wolfenbüttel-
Salzdahlum, Germany, Tel: 05331 30080, Fax: 05331 78883.

FREDBENTHAM

WHAT NEXT?

Looking back just 21 years of Strand's 80 years I discovered a thought provoking editorial in my last TABS (Vol. 31 No.3 1973) under the title "Entente Cordiale".

Here is its first paragraph: "When entertaining the technical staff of the Comedie Francaise during their recent visit to London, of all the delights we set before them (including Colour Music!) nothing received greater approbation than a jar of English pickled onions. This must not be taken simply as indicating a very low standard for the rest of our entertainment. Au contraire as they might say on their side of La Manche, everything we did was received with enthusiasm and it was a heart-warming occasion all round. Nevertheless, while fond of an occasional pickled onion ourselves we never for a moment suspected that the content of a standard jar purchased across the grocer's counter or removed from the supermarket shelf could invoke cusinary rapture in anyone - let alone the French. Yet here it appeared was the dish or rather the jar for the gourmet."

It is intriguing that 'my' editorial goes on then to remark that on the radio there had been "a tale of an EEC committee which for some years now had been endeavouring to standardise on a

formula for a European pickled onion. Needless to say this was to be quite different from the traditional British recipe, but as loyal - if new - members of the EEC, our picklers would be expected to comply!" Think of it, that was 1973 and I have a feeling that particular EEC committee has not finalised the recipe yet. Now it is all very well to play about with something that has been and will be around for a long time; but what of today's technology - here today and gone tomorrow, or at most, the day after tomorrow? The EEC can't stop inventors. Even to devise standard EEC signs for a fundamental, such as toilet identification, is fraught. Already at least 50% of the female sex now wear trousers of one kind or another. So there may come a time when the standard EEC be-skirted sign will convey no message to those in need.

Changing direction somewhat, at this time we are faced with the threat of the Europlug: of course it would be nice to have the same plugs and sockets all over Europe but is this practical? After that change-over is completed goodness knows when and at goodness knows what cost, is it at all certain we shall still need to distribute power in that way? What I am certain of is that had there been in the 1930s a Euro-stage-lighting-control specification I would never have been allowed to unveil an organ-console for that purpose back in 1935! ♪

STRAND

book review

ADVICE ON ELECTRICAL SAFETY AND PORTABLE APPLIANCE TESTING IN THEATRES

Published by Association of British Theatre Technicians, paperback, 55pp

Sponsored by Strand Lighting Ltd

Since the Electricity at Work Regulations came into force in 1989, confusion and controversy have reigned in the theatre industry, particularly on the subject of portable appliance testing.

For 5 years, many questions have gone unanswered: Who is responsible? What equipment must I test? When? How often? Do I need to keep records? Should I also be taking other safety precautions?

Answers to all these questions,

and many more, form part of this new booklet from the Association of British Theatre Technicians. The booklet starts by explaining the background to electrical safety testing, and the responsibilities of management and staff. It then gives guidance in the setting up of a testing schedule, with a very thorough set of notes about which tests to apply to which appliances, how often, and what results might be expected, together with suggestions for other appropriate safety measures. An excellent explanation of the requirement for Earthing as a safety measure completes the booklet.



Advice on Electrical Safety and Portable Appliance Testing in Theatres is available from the Association of British Theatre Technicians price £10 (including postage and packing). ♪

LANDMARKS



Perfect programmability - with the human touch.

LBX is Strand's new generation lighting console, bringing all the benefits of Strand's advanced Genius™ lighting software, to a powerful memory + manual hardware platform.

- Rugged console designed for concert lighting, multi-purpose venues and touring
- Configurable as 96 channel single preset; 72 channel single preset with 24 submasters; 48 channel two preset; or 36 channel two preset with 24 submasters
- Integral auto-sensing 120V - 240V power supply
- Integral 3.5" disk drive and separate VGA colour monitor
- Genius software provides an intuitive operating system and a foundation environment for controlling up to 512 DMX dimmers or scrollers using 25, 50, 75, 100 or 125 channels
- Optional Kaleidoscope and Communiqué software packages expand effects and system communications capabilities

Call us today, or talk to your Strand dealer for more information about the revolutionary LBX lighting console.

NEW
LBX CONSOLE
OPERATES WITH
STRAND
SOFTWARE



Strand Lighting