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IIGHTS!

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JULY 1992

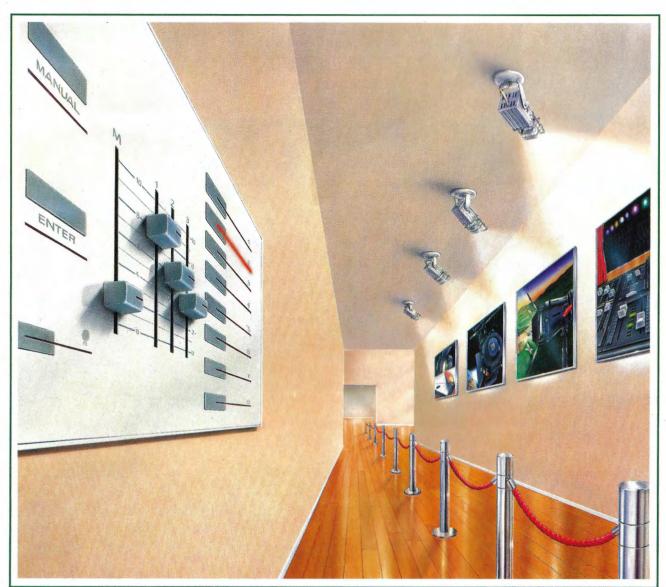
VOL. 3 ISSUE 2

BLUE ANGEL KEEPS SPIRIT OF DIETRICH ALIVE

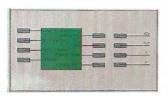
A Strand Lighting

STRANDSCAPES

—— No. 3 ——







trand's sophisticated Premiere system brings new dimensions to the fine art of lighting control.

Together with an exciting range of luminaires, dimmers and control stations, Premiere is giving designers new inspiration for projects ranging from art galleries to be

projects ranging from art galleries to hotels.
Strand Architectural Lighting Systems —
modern masterpieces from an old master...

Strand Lighting

Brighter outlook IN THIS ISSUE for 'theme' lighting

In this issue of Lights! we feature lighting for the 'theme' venue market, where designers are breaking away from tradition to use some of the more technologicallyadvanced controls available, to obtain stunning effects.

The colourful animal characters created by childrens author Beatrix Potter are presented in storybook settings at a permanent exhibition in Britain's Lakeland where controls are by way of a Strand Premiere®.

This lighting control system – more often found in hotels - enables designers to apply stage lighting principles and create effects by programming the entire sequence on a Personal Computer, fine tuning on site and leaving a complex 'show' to be run automatically or from simple manual commands.

Premiere® now brings the power of professional controls to a much broader range of situations, where mere illumination would be inadequate for the presentation. The same advanced lighting controls are also to be found on another recently-opened 'theme' park in Europe where they have been used extensively in hotels, along with Strand EC90 digital dimmers. Still more EC90 dimmers, deployed with Galaxy controls and large quantities of Strand luminaires, are used on the attractions and live performance areas.

Lights! also takes a look at low voltage tungsten halogen lamps which became a cliche of retail lighting design in the 1980's but has now matured into complete systems embracing luminaires to create theatrical effects in conjunction with dimming and controls, suitable for architectural spaces.

Elsewhere, Francis Reid travels to the Calgary Performing Arts Centre in Canada for Lights! and Fred Bentham provides his views on cinema architecture

Many of our readers have asked for more 'how to...' type of information, so Lights! introduces a new series, starting in this issue by explaining how to avoid creating 'muddy' colours when dimming. For further help we review Francis Reid's latest 'Stage Lighting Handbook' and Graham Walne's new venture into video-based training.

Finally, once again Strand previews a number of new products.

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FEATURE

One of the great showbiz names, Marlene Dietrich, died in May but her spirit lives on in The Blue Angel. Awardwinning international lighting designer Chris Parry illuminates.

TECHNICAL

Low voltage lighting is making big news. We look at the background and technical implications.

NEWS

Lighting Gloria Estefan at Superbowl/spotlight on the Lord Mayor of London's coach/lights in a Cathedral/Rugby School's new video and TV studio/Strand refit for Johnny Carson's old studio.

FEATURE

A novel use of Premiere® lighting controls by Olivier Award-winning Mark Henderson brings to life the world of childrens writer Beatrix Potter.

10 PRODUCTS

Preview of the new range of Strand products.

12 FEATURE

A special Lights! report from Canada by Francis Reid on Calgary Centre for Performing Arts.

TECHNICAL

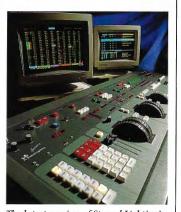
Dim on the subject of dimmers? We look at ways to improve stage effects.

HISTORICAL

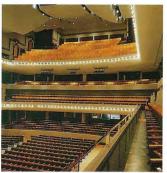
Continuing our series on Strand 'firsts' worldwide. PLUS Fred Bentham on cinemas old and new. PLUS exciting new offers. PLUS your Strand Lighting contacts worldwide.



By coincidence, the Royal Shakespeare Company's production of The Blue Angel arrived in London's West End just as the entertainment world said 'farewell' to the legendary Marlene Dietrich. Lights! meets lighting designer Chris Parry.



The latest version of Strand Lighting's Galaxy, the Galaxy Nova, is launched with a host of new features. It takes its place alongside this season's new products from Strand, previewed on pages 10-11



Francis Reid travels west across the Canadian prairies to discover a gem of an entertainments venue in Calgary.

Front cover: Marlene Dietrich as Lola' in Josef von Sternberg's 1930's film version of The Blue Angel. The movie made Dietrich an international star. The revival of The Blue Angel opened in London's West End in May, where award-winning international lighting designer Chris Parry recreated an `impressionist feel with Strand luminaries and controls. Dietrich's link with Strand Lighting extended over many years. She boasted her personal lighting designer in Strand's Joe Davis, doyen of the lighting world. Cover story over the page. Photo:British Film Institute

In recent weeks the entertainment world has mourned the loss of the legendary Marlene Dietrich. Here we look at the strange coincidence that has linked the lighting scenes in the



BLUE ANGEL KEEPS SPIRIT OF DIETRICH ALIVE

n one of those curious coincidences peculiar to theatre, on the very day that the legendary Marlene Dietrich died – May 9 – she was about to be thrust into the limelight again in at least two major European cities.

But the loss to the world of show business was an unplanned publicity coup for the Royal Shakespeare Company's touring production of *The Blue Angel*, which opened for a limited run at London's Globe Theatre in May. This was the story which in film form launched Dietrich's career as an international star in 1930. It features the song for ever associated with Dietrich, 'Falling In Love Again'.

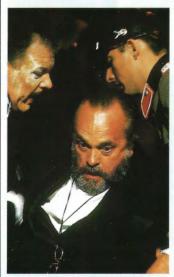
The stage version of *The Blue Angel* also happened to be playing Dietrich's 'home' town (at least before she emigrated to the USA) of Berlin. And the link between the London version of the musical play and the United States is British lighting designer Chris Parry – currently resident teacher of Lighting Design at the University of California, San Diego.

Chris is no stranger to the Royal Shakespeare Company. For 13 years, until 1988, he was attached to the RSC. Over the years he has become renowned both sides of the Atlantic for his lighting designs. In 1987, for example, he won the New York Drama Desk Award and was nominated for a Tony Award for the RSC's Broadway production of *Les Liaisons Dangereuses*. He has since gone on to win further awards in California.

The new production of *The Blue Angel* arrived in

London's West End following an extensive British circuit which has taken in The Other Place theatre, Stratford-upon-Avon and such unlikely venues as sports halls and gymnasiums. Chris was invited back from California in April last year to design lighting for the show, and admits he was much influenced by director Trevor Nunn's use of space for the bizarre set.

The play is set in Berlin in the 1920's. It charts the fall from grace of a respected University professor who falls



Philip Madoc as Professor Raat.

in love with cabaret singer Lola – the part originally played by Marlene Dietrich – which in this production is played by the stunning Kelly Hunter. In designing the



Kelly Hunter in the RSC's The Blue Angel.

lighting, Chris admits he intended to achieve a strong colour effect reminiscent of the inter-war German impressionist painters, such as Otto Dix and George Grosz.

Surveying the lighting rig, Chris observed, 'There's not a Par Can in sight!' And thereby hangs a tale of the differences between lighting on either side of the Atlantic.

He explained, 'I am a great fan of the fresnel. If I want a colour wash I can either use one fresnel or four parcans, but I don't like joining together a series of lamps to make one area of light. I like the quality of light from a fresnel. I like the smoothness of colour and the single shadow you get.'

On *The Blue Angel* he has used two 2000W fresnels to backlight the whole set. But he says, 'That is one thing I find about working in the United States – lighting designers there tend to use a lot more lights joined together to make a single wash. I have trouble convincing them that it is not always necesary!'

The Blue Angel set - partly as a result of its travelling history - is divided into a series of angular spaces, with acting shifting from one area to another - 'very filmic', as Chris says. There were also a number of 'practicals' to be taken into account - street lights and lights behind windows, for example. The show's band has also been incorporated into the stage set, although only three of the six musicians can be accommodated on the small stage.

Principal effects are achieved by 19 colour scrollers, to which Chris paid particular attention, since the nature of the show means that live colour changes are necessary.

Luminaires include a number of old Strand Patt 243's ('The best lamp Strand ever made.'), some of which have strategically-placed 'blackwrap' to prevent light spill distracting the audience from the action on stage. The rig also includes Strand- Patt 743's, plus 1200W Cantatas, one of which is rigged for a window gobo.

Built into the stage set and designed to look like raised street cobbles, are footlights comprising MR16 12v lamps, which along with a follow spot, provide the necessary 'cabaret' feel for musical numbers. Lighting control is by way of a Strand Gemini 2 driving 160 dimmers.

Apart from the lack of parcans, *The Blue Angel* lighting rig is also without PC's. Chris admits, 'I have never used PC's. To be honest I have never become comfortable with them.'

Now a confirmed Californian, Chris is able to make the transition between lighting in the United States and Europe despite the noticeable gulf in lighting practices and terminology on both sides of the divide. For example, what in the UK is a gobo is a template or pattern in the USA. An ellipsoidal in the States is a profile in Britain, and so on.

He said, 'If I go to a regional Rep in the United States and ask for a fresnel, they think I'm completely insane. They have never had one in the building.

'A lot of the differences are that lighting design education in the United States is largely carried out by academics who are non-working professionals and often using the teaching methods of 20 years ago.

'I try to teach my students that the instruments we use are paintbrushes. It sounds a terrible cliché but it's true. You can't always use the same brush for everything you want to do.'

Whether or not his crusade amongst the earnest students



The stage set.

of California is paying-off, the professionals are taking notice. Chris has recently won a Los Angeles Dramalogue Award for *Search and Destroy* at California's South Coast Repertory, and for *Twelfth Night* at La Jolla Playhouse, California.

And the next stop? Hopefully, Broadway again with the musical *Elmer Gantry*, which is due to transfer to the East Coast in the near future.

Low voltage lighting may be buzz words of the industry at the moment but how much do we really know about the subject? Our 'guided tour' explains how it is developing.

SUCCESS FOR LOW VOLTAGE

rguably one of the most successful light sources of the last decade has been the low voltage phenomenon.

A compact tungsten halogen lamp capsule is accurately combined with a precision-facetted glass dichroic-coated reflector to allow approximately 50 per cent of the heat to be transmitted through the reflector, permitting a controlled beam of light with reduced infra-red content to be projected forward on to a lit object or surface.



Low voltage lighting with Strand Minispots.

The compactness of the source, relative coolness of the beam (compared to equivalent tungsten display spot lamps) and light quality – an ambience of whiteness and crispness – are some of the reasons why low voltage lighting has enjoyed such universal popularity. Operating from 12-volt supplies, these lamps provide energy-efficient, longer life alternatives to much higher wattage PAR 38 spots, a cooler operation and the opportunity for smaller and more efficient luminaries.

The beam produced by a low voltage lamp is similar in quality to the soft edge focus from a fresnel spotlight but without the ability to vary from flood to spot. This is only achieved by changing to lamps of different beam angles. Light sources are available in a range of beam spreads from narrow through medium to wide angles.

Expanding this theatrical analogy the Strand Lighting Minispot range harnesses the performance of dichroic lamps to achieve a useful control of the beam and provide the full range of facilities and effects found in larger professional luminaries.

For use in museums, galleries, restaurants, hotels and a whole gamut of venues, Minispot cleverly allows the lighting designer to use stage lighting principles at a scale appropriate to the building.

Readers of TABS (December 1967 Vol, 25

No. 4) may recall an earlier incarnation of Minispot with Patt, 100 profile Patt, 103 fresnel spot references, which enjoyed popularity a quarter of a century ago. About 400 were in use at Madame Tussaud's London exhibition and several hundred more in their Amsterdam venue.

The advent of the 12-volt dichroic lamps (referred to as MR 16) removed the need for an optical system in the lamp housing, by using the lamp's own integral reflector to focus on the gate and with a pair of exposed lenses on front runners, gives a 30° to 50° variable zoom profile spotlight. Add four adjustable shutters and we have a fully operational framing spot which can project images using miniature 'E' size gobos (patterns) or colour by selecting from a variety of hues of dichroic filters.

The minispot enables designers to direct and lead the eye in a way familiar in the world of theatre but seldom exploited in architectural applications. One effect is the recessed picture spot application where, apart from a minimal ceiling aperture, there is no indication of the illuminating source, whilst the `framed' picture itself appears to exhibit a lustre of its own. Careful planning for positioning is recommended to achieve maximum effect, together with dimming control of the ambient illuminance.

For applications where the aim is to draw attention selectively without revealing the source of illumination or introducing unwanted glare, Minispots could usefully be combined with Strand Darklights to add a strong, verticle statement, creating pools of light and areas of focus.

Darklights use dichroic lamps in association with a specular black truncated cone, designed to transmit downward light, whilst internally reflecting and containing spill light without glare or revealing the source - the effect being a dark aperture seen from normal angles.

Low voltage tungsten halogen lamps are perfectly suitable for dimming but it is wise to ensure the combination of transformer and dimmer is compatible. Transformers of the conventional wire-wound type can be dimmed through application of the dimmer output to the primary side, and it is prudent to downrate from maximum dimmer capacity to allow for surge currents associated with an inductive load.

Asymmetry protection insures against potential transformer damage from any spurious DC. Also, some Strand dimmers have been purpose designed for transformer-fed loads and incorporate a `soft start' feature to switch lamps on gently by reducing thermal shock to the lamp filaments and include an automatic top set, as an aid to extending lamp life. Following an exponential law, lamp life can double with a five per cent reduction in voltage.

Low voltage lighting has now come of age. The system comprising lamp, luminaire, transformer and dimming, used sensitively, can enable theatrical lighting principles to be applied to a variety of spaces within the built environment, expanding the opportunities for creative lighting design.

A fact-sheet on low voltage lighting is available from The Marketing Department, Strand Lighting Limited, England.



STRAND TOUCHDOWN AT SUPERBOWL



Gloria Estefan rises to the occasion.

spectacular Halftime Show starring singer Gloria Estefan plus a cast of 1300 performers, brought a touch of winter magic to Superbowl XXVI in Minneapolis in January, seen on TV by millions around the world.

Three stages, including two scissor lifts, and four truckloads of scenery provided the centrepiece for the show at The Metrodome Stadium. Lighting control was by way of a Strand Lightboard M and CD80 dimmers.

During the performance, stadium lights had to remain on, so art director Jim Waters made extensive use of show lighting to add the necessary sparkle.

Chasing lightstrings adorned the side stages and grew out of the orchestra pit as the centre stage scissor lift hoisted Gloria 30 feet above ground.

The Lightboard M was selected by David Johnson, of show designers VEE Corporation, for its ability to load and run complex effects, allowing lights to chase and zone, in addition to having full manual override and cues at the touch of a button. Dimming was via CD80 packs located on the sidelines.

David told *Lights!* 'I used Strand equipment because I wanted a system I could trust. When you only have one performance for a worldwide audience of millions, you want everything to work perfectly!'

Editor's note: Just in case you missed it, Superbowl resulted in a 37 to 24 win for the Washington Redskins over the Buffalo Bills.

GOOD-NIGHT, JOHNNY! HELLO, JAY!

s Lights! was going to press the USA was saying 'happy retirement' to legendary chat show host Johnny Carson.

Over the coming weeks, Carson's Tonight Show 'home', Studio One at NBC-TV, Burbank, will see the installation of the first Strand CD90 digital dimming system sold in the States, as part of a complete refit for Carson's successor, comedian Jay Leno.

CD90 won the prestigious Product Of The Year award at last year's Lighting Dimensions International show in Reno.

During the seven-week studio refit, which includes installation of a Strand Light Palette 90 control desk, the show will broadcast from NBC's Studio Three.

Jim Riendeau, manager of staging services at NBC, told *Lights!*, 'We have a two-week down time during the Olympics when we will transfer the set back to Studio One.

'CD90 was chosen because it is a state-of-the-art smart dimmer. We are expecting great things from it.'

LIGHTING THE LORD MAYOR'S COACH

ow do you display a huge light-and-heat-sensitive priceless antique the atrically, yet still manage to please the conservationists? This was the problem facing the Museum of London's electricians and lighting contractors Donmar when they were called on to light the Lord Mayor of London's State Coach, on permanent exhibit at the Museum.

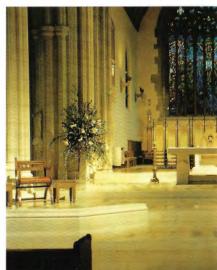
Their solution was to use 18 Strand Quartet PC's fitted with 650W tungsten halogen lamps, controlled by Strand 20A Unidim dimmers. This allowed the 'seamless' overlapping necessary for lighting such a large exhibit. It also met the Museum's need for light levels to be under 200 lux.

The State coach, built in 1757, is covered in gold leaf and oil paintings. Now used only for state occasions it is kept for most of the year on blocks in a large water tray in the Museum. This maintains humidity levels and so prevents coach timbers from drying out.

LET THERE

ajor alterations to St George's Roman Catholic Cathedral in Southwark, South London proved the ideal opportunity to upgrade lighting of the main worshipping areas.

Strand Cantata F fresnel spots and Cantata 18/32 profile spots were used by lighting designer Anthony Easterbrook to highlight special features in the sanctuary, together with altar, ambo (reading desk) and



St George's Cathedral, Southwark.



RUGBY LEADS THE FIELD

ne of the most advanced teaching studios in the educational world has been installed at the famous Rugby School in England, complete with a professional-standard Strand lighting rig.

The studio forms part of the school's new 2000 m² (21,500 sq ft) Design Centre, which has put Rugby light years ahead in educational thinking. For it will be used, amongst other things, to train and groom tomorrow's businessmen to become 'video-literate' in the same way that computer literacy is an essential skill.

Director of Drama and Media Studies, Graham Nurser, explained, 'Our pupils are, in most cases, probably going into careers in the business world. There is an increasing demand on all people in positions of responsibility to be able to 'perform' in front of cameras – giving TV interviews, for example.

'One of our aims is to equip them with the skill and confidence to know how a studio works, how an interview is planned and how to get their point of view across in an interview.'

As part of their course, the 13-18 year old boys and girls gain hands-on experience in rigging sound and lighting equipment, operating cameras, editing, producing, script-writing and interviewing.

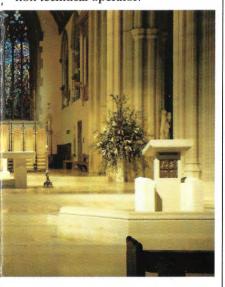
The school's long-term aim is to produce its own educational programmes for use within the classroom.

Lighting equipment supplied by Strand includes an MX 48-way control desk with plug-in memory card, EC90 digital dimming and a selection of Castor, Polaris and Bambino spotlights, Arturo Argento softlights and Iris cyclorama floodlights.

BE LIGHT...

cathedra (Bishops chair). Cosmetic lighting of the four pillars surrounding the sanctuary, and the ceilings above, was achieved with Cantata 26/44 1200W profile spotlights, mounted on vertical pipes fixed to the pillars.

Lighting control is by way of nine Strand Microdimmers, which enables a series of lighting 'scenes' to be memorised, ready for operation by a non-technical operator.



MOUNT ROYAL COMPLETED

The latest performance space in Calgary, completed in the spring of 1992, is the conversion of a lecture hall at Mount Royal College into a neutral box theatre – not black but a very deep dark grey.

Imaginative touches include full carpeting on the lighting bridges – not a luxury but an humanitarian gesture which will be appreciated by anyone who has knelt on expanded metal or tried to tiptoe silently on blockboard.

Lighting control is by an Impact and CD 80 dimmers.



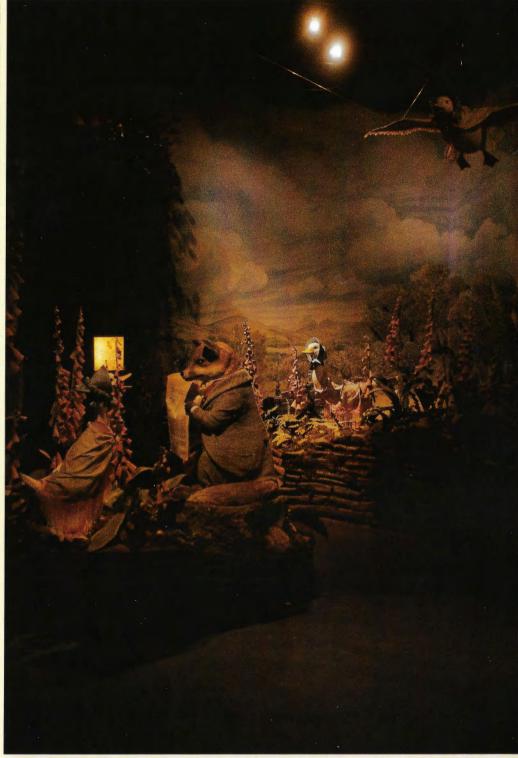
Mount Royal's new-look theatre

UK LIGHTING VENUES FOR '93

993 is shaping up to be an important one for lighting in Britain. The new European Lightshow '93', organised by the Lighting Association and the Lighting Industry Federation, will be at Earl's Court 2 from February 14-17.

Edinburgh is the venue for 'The European Lighting Conference' – Lux Europa 1993 – from April 4-7.

Later that month in Bradford the fourth Showlight international conference, 'Showlight '93', runs from April 19-21.



Jemima Puddleduck encounters a'gentleman'

Take a favourite childrens authoress and painter, some of England's most beautiful scenery and an award-winning lighting designer, and the resulting combination is nothing short of magical.

Richard Humphries reports

A Journey With Nursery Friends

peep inside the mind of every adult there is a secret place where childhood lives for ever. In one special part, for countless thousands of grown-ups, hide long-neglected nursery characters such as Peter Rabbit and Squirrel Nutkin.

If they are destined to live again, it is usually through the eyes and ears of your own children and grandchildren, as they discover for themselves the delightful world created by author and artist Beatrix Potter. But if you were to think hard – really hard – about your own bedtimestory wanderings through England's Lake District, where Beatrix set her stories, just what images would you conjure up?

That was the starting point for the design team in setting the mood for the recently-opened World of Beatrix Potter exhibition. Housed in a former stone-built boat building workshop at Crag Brow, in the centre of Bowness-on-Windermere, it is just across the lake from Sawrey, where the childrens authoress lived, wrote and painted.

This is a majestic landscape of ancient, craggy mountains, bottomless dark lakes, and shafts of pale light streaming between low-scudding clouds. More than anywhere, it is watercolour country, which is why Beatrix Potter was so able to evoke her homeland in her art. It is also the undoubted 'feel' which comes across in the lighting design of the exhibition, where lowvoltage lighting and Strand's Premiere® controls combine to recreate the magical landscape of the books.

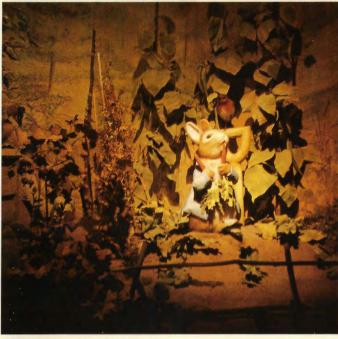
The exhibition tour begins with a split-screen cinema briefing to put Beatrix Potter in her historical context – why, where and when she wrote the stories which were to capture the imagination of children around the world.

A door opens, and visitors young and old are cast back to an ageless scenic landscape, following a woodland trail introduced by Peter Rabbit and meeting along the way all the Beatrix Potter favourites. The effect created by the lighting is magical – just the way the better moments of childhood used to be.

Simon Needle, of installation contractors Electrolite explained, 'The idea is that the exhibition is split into a number of scenes. What we needed was a control with a multiple playback facility, and within that there would be a number of cues.

'That was what we wanted. The trouble was there was nothing around that would do the job adequately at the time.'

low-key feel. We wanted the light to be a delicate skim across the scenes - very much a theatrical feel. At the same time, the various models needed to be pinpointed. What we were looking for, in terms of lighting control, was something which would be totally flexible. We had a



Peter Rabbit in a scene taken from his own story.

Award-winning lighting designer Mark Henderson explained, 'Originally this was going to be a 'dark ride' type of exhibition but the space available would not allow it, so we went for the woodland walk through a number of scenes.



Mrs. Tiggywinkle and 'visitor'.

'We knew from the beginning what the 'feel' of the exhibition would be but it was almost impossible to draw it up in three dimensions. It was extremely difficult to plan where to place a specific spotlight to light a particular area.

'What we wanted was a

number of different scenes to light, some of which change during the 'tour', and a number of items to highlight within those scenes.

We considered a theatricalstyle control board to do the job and seriously considered the Gemini. We realised that although it was possible, it would have been an absolute nightmare to plot something so complex with that type of control, particularly as several moving sections needed continuously cycling channels in addition to static lighting.

'I called Strand Lighting and someone there hit on the idea of using a Premiere control, which was designed primarily for architectural applications. It proved to be just what we were looking for. Each area of the exhibition could be treated as a separate 'room'.

Eleven of these separate 'rooms' were used in total, each having its own pre-programmed sequence of lighting scenes.

To simplify the system for the operator, last minute programming allowed a single push-button to start and stop the lighting.

This re-programming took place literally hours before

the exhibition first opened to the public and 'artistically and operationally, it has worked out very well,' says Mark.

The same Premiere® control is likely to be used to run lighting sequences in an 'activity centre' due to be converted from an adjoining building over the coming months.

The evocative effect of The World of Beatrix Potter is heightened by specially-commissioned music providing background accompaniment to the meandering journey. The score by TV composer Ernie Wood captures the mood perfectly.

What makes the exhibition all the more disconcerting is that Beatrix Potter, in her stories, set her characters in real places - the places you left behind, just outside the exhibition entrance overlooking Lake Windermere. It would be easy to dismiss her storybook characters as merely the product of a fertile imagination, yet you are left half-wondering if they really existed.

On the hillsides above the lake, young rabbits who might be the descendants of Flopsy, Mopsy, Cottontail and Peter, play innocently in the evening twilight. Malevolent jackdaws lope around the streets of Bowness, lured by the prospect of thieving keepsakes from tourists.

Jemima Puddle-Duck birds still wander the lanes and

farmyards, mingling easily with hedgehog relations of Mrs Tiggy-Winkle. And somewhere out there, no doubt, is a real-life Mr McGregor, forever coming round the end of a cucumber frame in pursuit of mischievous rabbits.



Squirrel Nutkin bigh and dry.

Editor's note: Mark Henderson is, perhaps, best known for his theatre lighting designs. In April this year he was nominated as Lighting Designer Of The Year by the Society of West End Theatres (SWET) and received an Olivier Award for his lighting designs on two productions at The National Theatre, Murmuring Judges and Long Day's Journey Into Night.

PREMIERE - FIRST FOR ADAPTABILIT

trand Lighting's Premiere® programmable lighting control system has already proved to be a huge hit in architectural circles where its complete flexibility and simple controls have made it ideal for applications such as hotels. It is already used extensively in North America, with Britain following close

behind, and has recently been used at a new theme park resort near Paris.

Features include 128 channels, each with a possible 128 presets, controlling up to 512 dimmers. Up to 64 control stations are possible, ranging from a simple, single push-button to a sophisticat- Premiere ® screen display

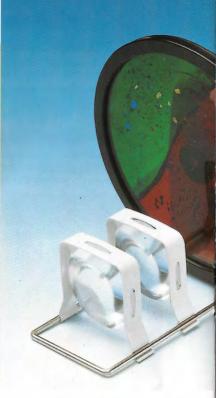
ed menu-driven command station with alpha-numeric display. Most importantly, the entire system can be customized.

Other facilities of Premiere include an astronomical time clock, disk storage, automatic events facility, control of up to 32 rooms per system, local programming via standard control stations, or off-site with a personal computer running Windows V3.0 (or later) software.

* 'Windows' is a registered trademark of The Microsoft Corporation.

MHAT'S NEW?





4kW Quasar Quattro

Super Quasar 2500 was an instant success when it was launched last year. Designed around the new 2500W MSR lamp, it produces a powerful focused beam of light required on many location shoots. We are not resting there and the recent introduction of the 4kW MSR lamp heralds an even brighter Quasar – Quattro Quasar 4000SE. This boasts 60 per cent more light than the 2.5kW version and its incredibly intense narrow beam gives as much light as a 12kW HMI Fresnel in spot focus!

Galaxy Nova

The new Galaxy Nova demonstrates Strand's commitment to the highest level of memory lighting control. This latest version of Galaxy is styled in a new grey livery and now includes DMX 512 output protocol, digital time entry, colour change control plus improved screen and printing facilities. Galaxy Nova continues the standard features of Galaxy 3 – a capacity of 999 channels driving 1536 dimmers, 256 PALS automated luminaires, programmable effects, split control pods, remote desk and designer's controls, duplicate electronics, dimmer status communication – and offers

existing Galaxy 3 customers an easy upgrade path.

Alto

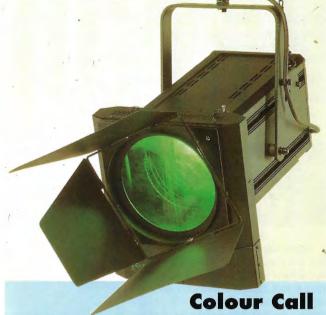
An all-new range of five 2.5kW 220/240V luminaires named Alto was launched in Berlin at the beginning of June. Tackling the difficult luminaire problems of more light and less weight, the Alto range is lighter than the Cadenza it replaces. It also accommodates either a 2kW CP92 or 2.5kW CP91 G22 base lamp for up to 25 per cent more light than with the 2kW lamp. The zoom profiles, available in 8° to 16°, 14° to 32° and 20° to 38° versions have the latest specification including rotating gate, adjustable balance point, and improved optical design. The Cadenza, which it replaces, was 20-25 per cent heavier than the equivalent Alto. Fresnel and PC versions complete the range.





Minispot Effects

Now in full production after its initial showing last September, Minispot Effects provides budgetpriced rotating optical effects based on the 12V Minispot housing for 50W or 75W lamps. With a choice of 6" animation discs including clouds, patterns, liquid oil or discs, breakup Minispot brings life to interior lighting of restaurants, cafes, stores. churches and company boardrooms.



Strand's new range of scrollers, Colour Call, is based on a tried and tested design which has been developed around theatrical and studio requirements for reliability, silence and ease of use. Typically, eleven colours are available on the gel string, and the removeable spools mean that changing a colour scroll is problemfree, even with the unit in place on the rig. The two versions cover a range of 1kW, 2kW and 5kW theatre and TV luminaires, and can be operated by any DMX/512 or analogue control desk.



Mini Lightpalette® 90

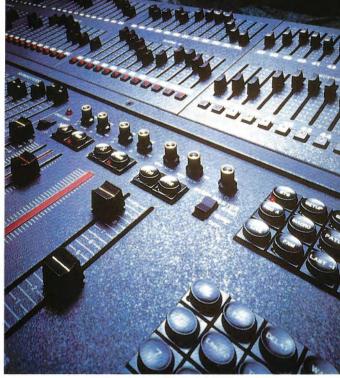
The long-awaited 'kid brother' to the highly successful Lightpalette® 90 was unveiled in Seattle this March at USITT. Mini Lightpalette® 90 has all the superb facilities of the large capacity desk but in a more compact format for users who are not looking for the full expandability of Lightpalette® 90. The desk includes all electronics to control up to 576 channels, patched to 1024 dimmers, 24 overlapping and programmable submasters, average 600 cues per show, 128 simultaneous fades, DMX 512 output protocol, up to 999 programmable effects, 999 channel groups, macros, function keys and remote controls. Show discs are compatible with Light-Palette® 90 too.



All new MX and Mantrix MX control desks will soon be capable of driving a terminal monitor (or PC with terminal emulation software) to give a mono or colour console status display. Details of channel levels, master fader positions, running effects, are all given, and memory levels can be interrogated.

Lightboard M

The familiar Lightboard M mid-range memory plus manual control has been enhanced with updated software, electronics and a facelift for 1992. Launched in April at NAB in Las Vegas, Lightboard® M is offered in four versions with either 96 or 144 channels driving up to 768 DMX, AMX and D54 protocol dimmers, through 24 or 48 submasters. Universal voltage power input, remote subs and programmable effects bring the Lightboard M specification right up to date.



The citizens of Calgary, Alberta, are fortunate in having one of the most modern performing arts centres in the world. And who says so? None other than Francis Reid, world renowned lighting designer, lecturer and author, who visited the city on behalf of Lights! to discover...

mple curiosity makes me seek out the new. But experience has taught me that most things are much more interesting once they have been run in. Performances, like wine, need time to mature. So the only first nights I ever attend are my own.

New spotlights launched at exhibitions may show promise but I need to experience them over various throw distances in several theatres before I know whether I want them to be part of my life. I have a compulsion to visit new theatres, even when they are still 'hard hat' sites. But a theatre and its audience need to grow towards each other. They tend to be cosier, friendlier places once the umbilical cord with architects and consultants has been severed, and perhaps just a few idealistic details tempered with the inevitability of reality.

A visit to the Calgary Centre for Performing Arts has been theatres were me-places. So much so that I broke a lifetime rule and illustrated a book with a theatre that I had never visited. Seven years after opening, the itch just had to be satisfied. I went to Calgary and I was not disappointed.

Only 50 miles from The Rockies and the stunning outdoor recreation opportunities of the Banff National Park, the half million-plus citizens of Calgary have an enviable quality of life which is enhanced by the performance programme housed in the theatres and concert hall of the Centre for Performing Arts.

The six-level complex of



The Jack Singer Concert Hall

high on my wish list ever since members of its planning team came to Bury St Edmunds when I was managing the 1819 Theatre Royal.

From the first drawings of intentions through to the photographs of the opening in 1985, it became increasingly obvious that the Calgary 400,000 square feet (about ten acres) cost Can\$90 million (about US\$76 million or UK £43 million). It occupies a full block of the city centre, incorporating elements of two heritage buildings dating from 1908 and 1932. Each auditorium has its own public entrance but the city's main



all-weather elevated pedestrian 'street' runs through the core of the complex. A 1960's planning law requires all downtown buildings to have a bridge connection to adjacent buildings on all four sides. The resultant walkway running at 15ft above street level is a welcome response to the motor car's invasion of every urban environment.

For arts marketing, such a public path through a theatre complex brings a whole new meaning to the phrase 'passing trade'. There is even a viewing window into the workshops.

All the Centre's auditoria were designed on the principle of To move forward, first look back. But there is none of the feeling of pastiche that is so sadly characteristic of much post-modern architecture. History has been used very positively. Successful aspects of old theatres and concert halls have been identified for development within the context of a building which is very much of today.

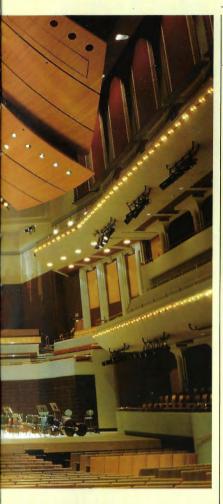
Jack Singer Concert Hall

The concert hall is based on the double cube format which slowly evolved to become the shape of all the great nineteenth century concert halls from Vienna's Musikverein to Amsterdam's Concertgebouw. Such halls in show box form had a sound quality which has continuously eluded acousticians struggling with the deep fanshaped raking tiers which became fashionable in the age of the cinema.

Calgary's concert hall is a music architecture landmark which has subsequently spawned halls in Dallas and Birmingham by the same acoustician – Russell Johnson of Artec Consultants Inc. These halls have such superb sound that Calgary's double cube has become the favoured shape for new halls on drawing boards everywhere.

The hall is remarkably intimate despite seating 1,800 plus 200 in the choir stalls. Calgary Philharmonic are the permanent residents but the 24m x 11.5m stage (79 feet wide by 38 feet deep) is home to music of every kind, with the sound adjusted by varying the height of the 55-tonne suspended canopy of laminated spruce in conjunction with acoustic banners of heavy velour.

A particularly neat touch (other halls please copy) is



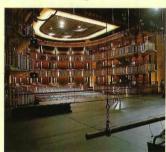
the ingenuity with which the motorised speaker clusters disappear when not required.

The Max Bell Theatre

This 750-seat theatre stems from the central European opera house traditions of shallow galleries extending as boxes around the side walls until meeting the proscenium. The box seats, however, focus rather more towards the stage than was the historical custom and the modern technology of air castors allows the side box tiers to pivot inwards or outwards to provide a flexible proscenium zone in conjunction with a hydraulic elevator offering thrust stage or orchestra pit.

The auditorium has been repainted recently. With the original pale peach, the architecture responded in a distracting way to the bounce from the production lighting, particularly when using a thrust stage. The new deep marbled green is attractively warm under the house lighting and becomes neutral during the performance. The fly tower is a generous 23m (78 feet); the stage is trapped, and Lekos® are rigged to light from every desirable angle. The Max Bell is the home of Theatre Calgary, the city's mainstream repertory company who came to the

but with a particular dedication to fostering Canadian dramatists. Founded in 1972 in the log cabin Opera House in Heritage Park – no flys, no wings and just 198 seats – this was a company ready to respond imaginatively to adaptability of a space based on what we have recently come to recognise as one of the most flexible periods in the historical development of theatre buildings.



The Max Bell Theatre

The Martha Cohen feels very modern but its proportions and basic ground plan are pure 18th century. They belong to a time before theatres were firmly divided into stage and auditorium – when indoor theatres were like a single room and outdoor theatres were often in a courtyard.

When I first saw the auditorium from the stage I felt I was back in Bury St Edmunds and as I moved on to the deeply thrusting apron of the current production I was able to feel, for the first time, how Bury was before the stage front was cut back during the 19th century. It was a big personal moment for me because it reconfirmed my conviction that the planned restoration of Bury St Edmund's Theatre Royal by the National Theatre will bring us closer than we have ever been to an understanding of the Georgian Playhouse

Calgary's audience of 450 sit in tiers which are curved in the manner of the more sophisticated Georgian theatres. (Smaller, simpler Georgian theatres had straight tiers following the line of the rectangular building shell in which they were installed.)

As a measure of intimacy, the furthermost seat at floor level is only 12m (39 feet) from the stage. The log cabin genesis of Alberta Theatre Projects finds a happy reference in the vertically darkstained timbered fascias of the tiers.

The space behind the tiers is open so that audience cir-

culation, including access stairways, is within the auditorium. While this is undoubtedly an advantage for promenade performances, I miss the way in which an enclosing wall reinforces intimacy. But this is a matter upon which – in Calgary and elsewhere – consultant Iain Mackintosh, leader of the 'rediscovered courtyards' movement, and I, have agreed to differ in a spirit of mutual respect.

The Empress Theatre

A further theatre exists as a concrete shell. It takes its name from a theatre which stood on the site of the centre over 80 years ago. Sections of fibrous plaster and fascia railings from the balcony of the old theatre have been preserved and will be incorporated in the completion of the new Empress which will commence shortly.

An Integrated Arts Centre

A balanced integrated programme is the aim of any arts centre. But if the major proportion of a City's performing arts provision is concentrated in a single institution there can be dangers of an arts bureacracy which not only stifles individual creativity but ope rates in a financial haze of cross-subsidy.

Calgary have cleverly avoided this situation by setting up an umbrella structure which not only allows each performance group to develop its individual artistic identity but divides the operation into a series of clearly defined cost centres. Thus Theatre Calgary and Alberta Theatre Projects can each operate their separate policies while benefitting from the workshops run by a jointly owned production unit. They and the many smaller companies who visit the centre on a more occasional basis also benefit from such central services as building maintenance, marketing and computer box-office.

Calgary also has the Jubilee Auditorium to house tours of musical epics. Banff with its year-round programme and summer festival is within reasonable driving distance.

The performing arts are alive and well and living on the prairie.

Leko® is a registered Trademark of Strand Lighting Inc.



Martha Coben Theatre

The centre cluster of 48 is raised through the canopy and the side clusters of 20 track-off sideways through doors into parking chambers. The lighting pipes and trusses hang neatly within the architecture and the decorations come very close to achieving the ideal of being exciting on entering but not distracting after sitting down.

Centre's opening with a reputation for quality, built up over the previous 20 years.

The Martha Cohen Theatre

The Centre's other resident acting company, Alberta Theatre Projects, is committed to innovative work, including international plays,

Fred Bentham's article in our last issue was illustrated with a picture of London's New Victoria Theatre. This prompted Fred to muse on the emergence of the 1930's super-cinema and today's multiplex solution for screening motion pictures.

NO MERMAIDS IN FINSBURY PARK OR CLYDEBANK

oth the New Victoria cinema and Finsbury Park Astoria opened in 1930. The Astoria was what was known as an atmospheric, or more appropriately dubbed by architect Julian Leathart, an 'outside-in' cinema. Over the auditorium there was a cyclorama ceiling representing the sky.

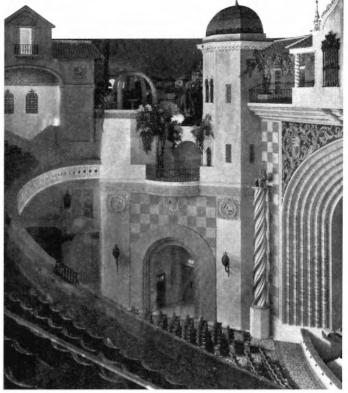
To me the colour changes and optical clouds lacked conviction up there. Only one atmospheric got my approval – the Richmond cinema by Leathart and Granger. In reality the New Vic in its original thirties prime did not look like the colour photo shown. That belongs to the 1973 refurbishment when warm colours were used, possibly to stimulate the sale of ice creams.

The architect Wamsley Lewisonly did one cinema, that undersea Mermaid's palace – an art deco masterpiece. As became the marine motif, cool green and blue colours were used and a fabulous feature was the seaweed

effect of the stalactite fittings drooping 12 feet below the dome. The planning and construction to get 2786 seats onto such a tight site was equally ingenious.

The New Vic auditorium, under the guise of Apollo-Victoria, is at present, and has been for eight years, full of special mechanical scenic effects for Starlight Express. It has become a theatre, which poses the question: what are the new cinemas like, built to day?

Well, I don't think any mermaid would feel at home in them. Multiplex is the key word. Clydebank near Glasgow would seem to provide a good 1990's example. It



The Astoria Finsbury Park - 1930's style.

forms part of a very large shopping centre and the complex conists of ten auditoria, ranging from 230 to 400 seats.

Complex is also a good word to cover the large amount of 'building services' type engineering involved. Coming down to basics, we are told that the plumbing alone cost \$80,000. And the auditoria lighting comprises

GLS lamps with Edison screws to facilitate lamp changing from floor level using a 'cherry picker'. Sounds practical but not very romantic. Oh! for those distant days of my youth in that Mermaid's palace.

Editor's note: The photograph of the New Victoria cinema in Vol.3 Issue 1 was incorrectly captioned as the Finsbury Park Theatre.

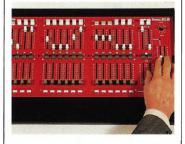
The Not-So-Grand Master

could never be disrespectful to the late lamented monument to the mechanical age of lighting control but I would offer a warning about the over-use of that little fader which shares its name.

I don't know whether it is due to the lack of spotlights or the lack of time available for lighting the typical non-professional show but there seems to be a common theme running through the lighting designs of many small drama groups and schools: if it's daylight, full up; if it's evening, same lighting, half check.

Let's just investigate what happens when you dim a light. Firstly, the intensity reduces but more importantly, the colour of the source changes from white towards red. This is often referred to as a reduction in colour temperature, which gives the feeling that the light is becoming 'warmer'. Now the colour you chose for the filter may look

by Andy Collier



great when the lamp is full on but look at it as the light dims. Remembering that a colour filter absorbs all wavelengths (and thus colours) of the light other than the colour it transmits, it follows that if the colour of the source changes as the intensity changes, so does the projected colour.

A well-known physical law in the theatre which says that if it can go wrong it will, means that inevitably the colour that you have chosen has very little red in it (it therefore absorbs red wavelengths). So when the lamp dims and goes red, the filter absorbs an even higher percentage of the available light than before. The result is what we commonly call 'mud' - a subtle browny-grey directionless colour. Try an experiment with a lavender filter to see the effect. The old Cinemoid 36 (Strand Filter 436) beloved of so many on the small stage and often called 'Surprise Pink' for its ability to be either a warm or cool colour depending on the dominant light in the scene is also marvellous for changing colour as the light dims.

Another factor to bear in mind is the method by which modern control desks perform a 'fade'. In the days when operators were called electricians, referred to their machines as Grand Masters and complained of muscle fatigue rather than typists' finger, the relative position between one-circuit and another remained the same during a

fade. This so-called 'shaft-master' relationship meant that circuits at a low level in a scene would fade out earlier (as the handle reached the bottom of the scale) than those at a higher level, minimising the 'mud' effect. Modern systems provide proportional fading where all channels fading to zero start and finish at the same time. This means that a well-balanced lighting state can be reduced to a grim grey glow very easily if the whole scene is 'dimmed a bit' to give an evening effect.

So how do we get over the problem? Concentrate on seeing the actors faces by using a few bright lights rather than dimly lighting the entire acting area; use cool colours on outside scenes, warm on inside scenes; create shadows to contrast areas of bright light; reduce the lighting on the scenery; emphasise the dominant direction of the light; use gobos to give a feel to the lighting; add practicals. But please, don't just 'dim it all down a bit.'

In our last issue we looked back at some of the lighting innovations introduced by Strand earlier this century. Here we continue charting our...

Milestones In Lighting History

1925 Royal College of Music, Parry Opera Theatre: Strand's first (and last for 30 years!) patch panel.

1926 Strand produced the famous 'The Centre Of The World' illuminated facade for the London Pavilion at Piccadilly Circus.

1927 The first tennis superstar, Suzanne Lenglen, appears in a C. B. Cochran revue, lit by Strand Lighting, at Holland Park Skating Rink, London.

1928 The new Savoy theatre opens in London with a production of 'The Gondoliers' and a new lighting installation by Strand. With the Stelmar ellipsoidal spot patent applied for, Strand was set to make the first 1kW and 500W ellipsoidal profile stage spots in the world.

1929 Century Lighting opened in New York by Edward F. Kook and his partners, Joseph Saul and Irving Levy, to serve Broadway. In England, Moss Mansell patented his Magnetic Clutch – a major step towards remote control of lighting.

1930 The place where thousands of romances began – the Locarno Ballroom in Streatham, South London – is equipped with Strand architectural colour lighting. London's new Adelphi theatre opens with 'Ever Green' and an innovation from Strand: the cyclorama is lit from floods and spots instead of the then staple compartment battens.

1931 Strand ventures into public building flood-lighting. Nelson on his Column in London's Trafalgar Square is lit by two Stelmars. Strand also lights the National Gallery and St.Martin-in-the-Fields church. At The Alhambra, Strand's massed spots on the circle front and on stage are another 'first'.

...to be continued.

INTRODUCTION TO STAGE LIGHTING

WHS PAL, 2-video set, 45 mins & 35 mins, (UK price: £85.00 each + VAT) Theatre Skills Video Library, The Greenlight Production Company

These two broadcast-quality videos have been designed as specific classroom and tutorial aids that will guide both teacher and student to a deeper knowledge of stage lighting techniques.

Devised and presented by international lighting designer and lecturer Graham Walne, the videos provide a step-by-step straightforward



approach to a sometimes confusing and complex process.

With the use of animated computer graphics and full colour display, Graham hands on 25 years experience in a stimulating and easily-understood presentation technique. He explains the importance of lighting design, the lighting

designer's role, sources of creativity.

These videos are in the UK PAL format at present but enquiries about other video formats should be directed to The Greenlight Production Company, The Brighton Studios, 12 Queens Square, Brighton, Sussex, BN1 3FD.

ENCORE FOR STAGE LIGHTING HANDBOOK

rancis Reid has a world-wide reputation as a lighting designer, teacher and author. For many involved in stage lighting his books have been not so much handbooks as tablets of stone. So it is in an atmosphere of great anticipation that the fourth edition of The Stage Lighting Handbook has been published.

It is five years since the Third Edition and the revised contents reflect recent changes in equipment, techniques and training. For example, the previous all-encompassing 'Lighting Equipment' chapter has been expanded into 'Lighting Instruments' which now includes automated luminaires and 'Lighting Control' which describes the latest memory desks and introduces digital dimming. The chapter offering advice on a career in stage lighting, including what to expect from a lighting design course, will be avidly read by students.

Following the 'stage setting' chapters on equipment, a comprehensive step-by-step description of lighting the show takes us through rigging, design, implementation and analysis. The chapters on different performance styles are particularly valuable for those who ask 'We know what the equipment does but bow do we use it?' Practical examples of lighting plays and musicals illustrates the points. And there will be a sigh of relief when many readers reach details of a basic lighting rig for a small stage, with advice on how to use it.

A well-balanced, definitive book on modern stage lighting principles and practice which both the novice and professional will feel has been written specifically for them. The Stage Lighting Handbook, Fourth Edition, Francis Reid. Published by A & C Black at \$11.95 in the UK, and by Theatre Arts Books at \$16.99 in the USA and Canada. ISBN 0 7136 3439 1

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STRANDSCAPES

—— No. 4 ——







When television began regular transmissions from London in 1936, the studios were lit by Strand.



Today, Strand remains at the forefront in entertainment lighting — with QuartzColor and PALS luminaires, Galaxy and Light Palette controls, EC90

luminaires, Galaxy and Light Palette controls, EC90 digital dimmers and suspension systems, operating in TV studios around the world.

Strand Lighting