

Lighting the Tower By Bianca Marafioti

On Saturday the 24th of January the Beijing and Paris city councils organised a fantastic parade to celebrate the Chinese New Year. The parade route ran from the L'Arc de Triomphe to the Rond Poind des Champs Elysées to celebrate the official visit of the Chinese president, Mr Hu Jintao. The Eiffel Tower, symbol of the ville lumière was bathed in red a symbol of happiness and prosperity. During the four day visit this most popular and well known monument was cloaked in scarlet light. To achieve this effect the Mission France – Chine de l'Elysée called on CITELUMIERE and MAGNUM, France's foremost entertainment rental company.

The challenge for the design team was that currently available luminaires were not powerful enough to light up the 300 metre high Tower and the team decided a new luminaire was needed. The new luminaire had to be based upon a proven design, operate under a wide range of conditions and be dimmable. It was decided that at least a 5kW quartz lamp would be required to achieve the desired light levels. The new luminaires would need to cover a variety of beam angles to enlarge the field up to 60 degrees. The design requirements lead the team to the concept of a high performance par light. After specifying the luminaire the next step was to find a manufacturer who was capable of meeting the challenge of producing it. This was the easy part, and the city council turned to STRAND LIGHTING to meet the challenge.

Alain Wisniewski. Quartzcolor Sales Manager took the project to the Quartzcolor design staff to come up with a light that would meet the requirements of the project. The R+D team chose to modify the powerful 6kW HMI par to ac-



A close up view of one of the lights mounted inside the tower to illuminate the top half of the structure/ Vue rapprochée d'un projecteur intégré dans la structure de la tour afin d'atteindre la partie

cept a 5kW Quartz lamp. The highly efficient lenses available with this light gave the designers a variety of beam spreads that allowed them to evenly light the entire tower.

On site the weather conditions were not ideal, a lot of rain and snow came up during all the 4 days the equipment was used. The Magnum team had anticipated the worse case scenario and was prepared for these tough conditions. All luminaires were dimmed and were warmed up slowly 1 hour before nightfall. This allowed the luminaires to heat

gradually and the crew to clear any snow from the equipment.

The units were integrated at the base of each pillar of the Tower in groups of 5 lights. There were partly visible to the public, lighting up the first level of the Eiffel Tower. The balance were integrated into the frame of the building to light the rest of the structure.

Mr Chupin, General Director of MAGNUM, was very pleased with the outcome, "We had a very tight schedule, requiring a response within 24 hours from STRAND LIGHTING on the feasibility of this as yet undeveloped or tested luminaire. We needed a prototype within 7 days to verify the concept and complete delivery had to be guaranteed within four weeks. STRAND LIGHTING was as good as their word and we are really happy". The new 5kW Par Tungsten met the needs of this project and will be available in general production soon.



A view from the base of the tower flooded in red light Vue de la base de la tour inondée de rouge

A occasion du nouvel an chinois, samedi 24 janvier dernier la ville de Pékin et la mairie de Paris ont organisé un défilé exceptionnel de la Place de l'Etoile jusqu'au Rond Point des Champs Elysées. Pour célébrer la visite officielle du président chinois HU JINTAO, la tour Eiffel, symbole incontestable de la ville lumière, s'est habillée en rouge symbole de bonheur et prospérité. Pendant quatre jours le plus célèbre des monuments parisiens a été baigné d'une lumière rouge écarlate : afin de réaliser cette œuvre la mission France-Chine de l'Elysée a fait appel à CITELUMIERE et à MAGNUM, premier loueur de France dans le domaine de l'événementiel.

Pour éclairer un bâtiment de plus de 300 mètres les projecteurs standards disponibles sur le marché ne suffisaient pas : l'idée était de concevoir un projecteur graduable avec un faisceau étroit pour une lu-



A view of the Tower from across the Seine Vue de la tour depuis la rive droite de la Seine

mière la plus concentrée possible ; la solution la plus appropriée, celle d'utiliser le châssis d'un PAR 6 kW HMI en y intégrant une lampe tungstène de 5 kW. Strand Lighting a été sollicitée pour accomplir ce challenge : les projecteurs commandés sont des PAR 5 kW tungstène qui permettent l'utilisation de 5 lentilles différentes élargissant le champs du faisceau jusqu'à 60 degrés.

M. CHUPIN, directeur général de MAGNUM, est maintenant très satisfait : Nous avions un timing très pointu, il nous fallait sous 24 heures avoir la réponse de Strand Lighting quant à la faisabilité de ce projecteur qui n'existait pas sur le marché, il fallait ensuite avoir un prototype sous 7 jours afin que nous puissions valider ce concept et avoir la livraison des projecteurs sous 4 semaines impérativement. Strand Lighting a été à la hauteur et nous en sommes très contents.

Quoi de mieux comme récompense de l'aboutissement de ce projet, que d'avoir M. CHIRAC et M. JIN TAO poser de-



Luminaires were placed at locations around the base of the tower to illuminate the lower half. Other units were located within the structure itself to light the upper half. -Les projecteurs sont placés par groupe de 5 autour de chaque pilier afin d'illuminer la partie basse, les autres projecteurs sont situés dans la structure

A New Office for Strand Germany

Strand Lighting Germany is moving to new premises effective March 22. The new offices will house all of our current German operations including sales, marketing, and customer support.



The new office is located at:

Strand Lighting GmbH Kurfuerstendamm 70 10709 Berlin

Telephone numbers remain unchanged at

Tel: +49 30 707 9510 Fax: +49 30 707 95199

The new offices features facilities that will allow us to develop our operation in Germany to better meet the needs of our customers. The new offices are located close to many of the leading theatres in Berlin. Igor Cernitori - Administration Manager at the new office adds " We would be delighted to welcome you at our new offices if you are passing give us a call if you can or just drop by for a coffee - our door is open".

Strand Lighting Deutschland bezieht ab dem 22.Maerz 2004 ein neues Buero. Von diesem Buero aus werden alle Arbeitsgebiete wie Vertrieb, Marketing und Kundenservice abgedeckt.

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Der besondere Standort und die Einrichtung der neuen Raeume werden es uns ermoeglichen, die Geschaefte im deutschsprachigen Raum zu entwickeln und auf Beduerfnisse unserer Kunden besser einzugehen. Igor Cernitori, Administration Manager des neuen Bueros fuegt hinzu: "Wir wuerden uns freuen, Sie alle in unserem neuen Buero begruessen zu duerfen. Wenn Sie in den

Buero begruessen zu duerfen. Wenn Sie in den Naehe sind, rufen Sie uns an oder, wenn Sie koennen, schauen Sie auf eine Tasse Kaffee herein unsere Tuer steht Ihnen offen."

Console Roundup

In New York, the hugely successful production of *Cat on a Hot Tin Roof* starring Ashley Judd, Jason Patric and Ned Beatty closes this March at the Music Box Theatre in New York. Based on the production which played in London in 2001, *Cat* was designed by the late Maria Björnson with lighting by Howard Harrison. As in London, the New York production used a Strand 500-series console to control the rig, predominantly consisting of conventional luminaires but also including scrollers and VL1000TS spotlights. The console and rig were supplied by Fourth Phase in New Jersey. Fourth Phase are also supplying the 500-series consoles to the ongoing tours of *Oliver!* (lighting by Jenny Kagan) and *Oklahoma!* (lighting by Ted Mather), both currently criss-crossing the US.

In London, Strand will continue their long association with the smash-hit musical *Les Misérables* as it moves from the Palace Theatre, its home for nearly two decades, to the Queens Theatre. Lighting designer David Hersey is taking the opportunity to revise the rig, expanding the moving light version which has been in use for the last eight years by adding VL2000 and VL3000 Spot units and DHA Pitching Digital Light Curtains. Control will be from a Strand 500-series, as at the Palace, but using a showfile adapted from the Mexico City version of the show (see the Winter 2002 Newsletter) by programmer Rob Halliday.

Another David Hersey designed show, *Anything Goes*, has just had its run at the Theatre Royal Drury Lane extended to the middle of the year; a 520i runs the show. 500-series consoles can also be found on *Jerry Springer: The Opera* (lighting by Rick Fisher), *When Harry Met Sally* (lighting by Nigel Edwards) and *Chitty Chitty Bang Bang* (lighting by Mark Henderson), all supplied by White Light, *Mamma Mia*, supplied by VLPS, and in many other venues.

VLPS are also supplying a 500-series console to the Royal Albert Hall for the current arena production of the opera *La Bohème*, designed by Andrew Bridge with John Harris run-



ning the console. Elsewhere in the world, Bridge's Tony-award winning design for *The Phantom of the Opera* is about to make its first appearance in Cape Town, South Africa. A 500-series console programmed by Hugh Hamilton will control the rig,

adapted from the origi-

nal by Michael Odam and now including High End Studio-

Colors alongside the conventional equipment. The console, SN nodes, an iPaq wireless handheld remote and the rest of the rig is being supplied by Bytecraft in Australia. A 500-series console also runs the London production of the show at Her Majesty's Theatre.

A 500-series console could be found in the venue prior to Phantom's arrival, running African Footprint, South Africa's longest-running show, with a lighting design by Declan Randall based on the original by Denis Hutchinson.



In Paris a 520 console will be used on Ken Billington's latest production of Chicago where it will run a selection of conventional and automated lighting for this popular musical.

Strand's Distributor in New Zealand Opens New Premises

Professional Lighting – Kenderdine Electrical Limited have moved closer to the center of Auckland to serve their customers better.

Their new facility is located at 66 Cook St, City, Auckland, New Zealand Phone +64-9-302-4100 Fax +64-9-302-4101 Their postal address remains the same at P.O. Box 12092, Penrose, Auckland, New Zealand Chris McKenzie and his expert staff look forward to

Chris McKenzie and his expert staff look forward to seeing their customers starting March 1 at the new building.

Building a Wireless Bridge in Sydney

Story and photos courtesy Bytecraft Entertainment

Sydney Harbour provides the perfect natural amphitheatre and one of the safest locations to stage the largest annual fireworks display in the world. The fireworks and lighting show regularly attract over 1 million people in, on and around the Harbour.

This year's show featured a new twist when for the first time the Lighting Designer Martin Kinnane and Programmer Sean "Motley" Hackett (shown below) could actually see what they were creating from across the Harbour at the Sydney Opera House. In the past programming always had to occur with the equipment on the Bridge. This year Strand's popular Australian Distributor Bytecraft Entertainment had a better idea.

Using Strand
ShowNet nodes and
WiFi wireless
Ethernet they were
able to connect the
lighting console with
all of the equipment
on the Bridge wirelessly across the Harbour. Strand's powerful and flexible
TCP/IP Network created a seamless and
reliable connection.



Sean Hackett is shown here working beside the antenna for the console location at the Opera House across from the bridge

The equipment used to create this included 4 Strand SN100 Ethernet Nodes , 2 D link Wireless Ethernet Access Points and 2 2.4 GHz Microwave Antennas. The results shown on the left were spectacular.

The rest of the Bridge Crew included:
Geoff Kelly - Senior Crew Chief/System Engineer
Robert Kelly - Head Rigger
Simon Eadie - Lighting Tech
Andrew Ritchie - Moving Light Technician
Mark Wlodarczyk - Rigger
Don McGregor - Space Cannon Guru
Neil James - Space Cannon Tech
Hugh Taranto - Operator
Australian Crewing - Carrying everything up and down the
Bridge
Paul Rigby - Bytecraft Project Manager.

The lighting rig included:

15 x Space Cannon 7k Ireos Pro Searchlight

55 x High End Studio Beam

32 x Martin Mac 2000 Wash

12 x Studio Due City Color

6 x Studio Due City Beam









New Lighting Control for the Atatürk Cultural Center Istanbul

Strand's involvement in Turkish Theaters dates back to 1947/1948 as the supplier of all the Lighting Systems in the newly established Ankara Opera House. Turkish State Opera and State Theatre have remained loyal customers for Strand and our distributor Nefan and we continue to be the exclusive lighting manufacturer to these Organisations.

When the Ataturk Cultural Centre was built in Istanbul in the late 1960's, it was designed to be Turkey's Premier



Opera Venue with a 1500 Seat Main Hall and a 500 Seat Concert Hall. The Stage design and lighting system was classic German Opera design when it was first installed.

In 1971 the building burned down and was re-built. Although the German influence remained, there were more modern Strand luminaires supplied by Strand Germany to meet the consultant's specifications. The original dimmers and Control Desk was still the Siemens Sitralux System. By the Mid 1980's it was decided to change out the Siemens control Desk which had serious problems. Nefan & Strand supplied a Galaxy System which remained in operation until 2003.

In 2003, The Ataturk Cultural Centre which is the home in Istanbul for the National Opera and National Theatre decided on a refurbishment program to include both dimmers and a new Control Desk. The Ataturk Cultural Centre Management was always a satisfied customer of Strand & Nefan, having received good technical support throughout the life of their systems. It followed that a new contract would be awarded to Nefan to supply the most technologically advanced stage lighting system system available. The new system comprises 3 High Density SLD



A view of the stage machinery and lifts

Dimmer Racks to replace the dated Siemens dimmers, and the Galaxy was replaced by a 550 System in the Main Hall. The new system gives operators full dimmer status reporting to the console and the along with advanced voltage regulation for smooth accurate fades. The new console proivded a natural bridge from their familiar Galaxy console and displays to a modern desk with fully integrated



The Cultural Center's new console is configured with Galaxy format video Displays

moving light controls. A wired and wireless network were installed for data distribution and a wireless handheld remote. Strand luminaires have been added to augment and replace the aged German lanterns.

The entire installation was was designed, installated and commissioned by Nefan technical division and their technical director Mr. Mert Yalcin. Nefan has been Distributor for Strand for over 40 years.

Intensive Arts Training at the North Carolina School of the Arts

Strand Lighting has had a long heritage of providing in depth seminars on subjects ranging from Network Design to Console programming techniques. Recently we worked with the Faculty of the North Carolina School of the Arts to create a seminar for them. The School of Design and Production at North Carolina School of the Arts offers a unique and comprehensive program of instruction and practice in eleven different concentrations in theatrical design, production, project management and theatre crafts. This extraordinary program is so successful in equipping students for professional positions that nearly 100% of the graduates find employment following Commencement.

One unique aspect of this instructional program is an annual two-week *Intensive Arts* mini-term when professional



specialists from the industry come to Winston-Salem to offer intensive instruction to Design & Production students.

Strand Lighting is pleased to be a strong supporter of *Intensive Arts*. In December 2003, Strand produced a two-day advanced lighting programming class titled *Automated Lighting Control with Tracking Consoles*. The instructor for this class was Bobby Harrell a New York City based lighting designer. Recent credits include *Boobs! – The Musical* for the Triad Theatre, *Lion's Den* for the Relativity Theatre Company, and as Broadway Associate for *Vincent in Brixton, Medea* and *Private Lives*.

Bobby commented that, "Producers and theatre companies continue to ask designers for more spectacular results on continually shorter schedules and shrinking budgets. The designers must respond by asking for more support. As long as the theatre design community continued to de-

mand more sophisticated programming at an even faster pace, programmers will need to respond with an ever-greater understanding of control desks. Advanced console training is a necessity in today's fast-paced theatre environment."

The class began at 10:00AM on Thursday, December 4 with 15 students serving as stagehands and production electricians to hang, circuit and run data for Bobby's lighting plot.

The control system featured multiple networked 500 series consoles with a wireless Ethernet remote focus unit and a wireless laptop supporting WYSIWYG. Instrumentation included three HES Studio Colors, one VARI*LITE VL1000T luminaire and four VARI*LITE VL2202 fixtures. Additional vendor support was supplied by Parlights, Inc.

Bobby was really impressed by the enthusiasm of the student. "One of the students (a 35-year old returnee) told me that this was 'the best master class he had ever attended'. On Thursday evening, I released everyone after a 14-hour day, but several students stayed to keep programming until I kicked them out 2 hours later."

Strand Lighting is committed to supporting professional development programs among the nation's colleges and universities and we are pleased to be a part of *Intensive Arts* at the North Carolina School of the Arts. For further information on arranging a seminar for your organization contact Jim Dunn at 714 230 8200.

Technical Training Seminars are offered regularly in our London office for our European customers and they can be contacted at +44 (20) 8735 9790. Information about our seminars in London can also be found at our website www.strandlighting.com under the support tab select training.

Bobby Harrell can be reached through his Website at http://www.bobbyharrelllighting.com or by email at bobby@bobbyharrelllighting.com

Console Programming Tips

By Rob Halliday

Softpatch

The softpatch is now a familiar tool in lighting consoles. Manual consoles were hard-wired so that fader 1 operated dimmer 1. Today's control systems let you decide which channel number controls which dimmer or dimmers. If you want to, you can therefore create a numbering system to suit the way you work whether by function (channels 1 to 10 are the front lights, channels 101-110 the backlights), geography (channels 101 to 110 the lights on bridge 1, 201 to 210 the lights on bridge 2) or any other method you choose.

The softpatch is also invaluable if a dimmer fails (plug the light into a different dimmer, change the softpatch so that the channel controls the new dimmer, run the show as normal), and has to be used when dealing with moving lights to match a channel to a moving light's type and DMX address.

Unlike some other consoles, in which a '600 channel' console always contains channels 1 to 600 and each channel can control one 'thing' (one light, one scroller, one function of a moving light - so 600 lights, or 300 lights each with one scroller), Strand consoles have a number of 'intensities' plus an additional number of 'attributes'; the REPORT or PATCH screens will show you how many your console has. So in a 200 channel 300- or 500-series console you could have 200 lights plus 200 scrollers.

You're also not restricted to using channel numbers within the console's number of channels. By default, when you clear a show from a console, you are given a 'one to one' patch, each channel controlling a dimmer of the same number. So a 600 channel console would have channels 1 to 600 patched, and if you tried to patch a channel number outside that range, you wouldn't be allowed to because all 600 channels are used.

However, it is possible to delete channels you don't want. Note that this is not the same as unpatching a channel. If you unpatch a channel from a dimmer:

[dimmer number] [@] [*]

that channel still exists in your show. It still has levels stored in cues. You can still see the channel number and its levels on the channel screen. It's just not driving any dimmers - so the light won't actually come on.

On the other hand, if you delete a channel: {CHAN>} [chan number] {DELETE CHAN} {DELETE CHAN}

then that channel is gone from the show, forever (-so be careful if you try this!!). But there is now one channel slot 'spare' - the channel count, on the topright of the patch screen, would now say Intensity: Total 600, InUse 599, Free 1. So you could now patch a channel 1001: [dimmer number] [@] [1001] [*]

In many cases it can be advantageous to delete all of the channels in the console before entering the soft-patch for a new show:
[PATCH] {CHAN>} [1] [THRU] [6000] {DELETE CHAN} {DELETE CHAN}

As you then patch your show, now using any channel numbers between 1 and 9999, only the channel numbers you actually patch are created. This means that when you've completed your patch, the show only contains the channels you actually have. A bonus is that patching or typing errors are easy to spot: on the LIVE channel screen a light-grey channel number means an unpatched channel, which in this case must be because you've either patched the channel then used the same dimmer for a different channel or just mis-typed a number somewhere.

Also, in any of the channel display modes that arrange channels horizontally (LP+, GENIUS+ and others), the console inserts a vertical line wherever there is a gap in channel numbers - so, if you'd created only channels 1 and 3 then there would be a line between them. Some find that this makes a useful visual break between blocks of related channels, such as between those bridge 1 and bridge 2 channels.

Other patch tricks? Well, while most people will step through patching one light at a time, it is also possible to patch ranges of lights in one go: [1] [THRU] [10] [@] [101] [THRU] [110] [*] to patch dimmers 1 to 10 to lights 101 to 110 respec-[1] THRU [10] [@] [110] [THRU] [101] [*] to patch in reverse, dimmers 1 to 10 to lights 110 to 101. And the same works with scrollers: [first dmx address] [@ATT] [first chan] THRU [last chan] [*] (note [@ATT] is called [ATTRIB] on 300-series consoles), and with moving lights, which can be a useful way of getting the console to figure out the DMX addresses of each light for you: [first start address] [@] [1] [THRU] [10] {@FIXTURE}[fixture number] [*] will get the console to patch fixtures 1 to 10 in turn.

Incidentally, if you can never remember the fixture numbers, try using the NEXT and LAST keys: [address] [@] [1] {@FIXTURE} [1] [NEXT] or [LAST] As you type the fixture number the corresponding fixture name will appear on the bottom of the screen; NEXT or LAST will then step through the library until you find the fixture you need.

You can also patch non-dim channels - channels which switch on and off rather than fading up and down - using the {@NON} softkey:

[dimmer] {@NON} [channel number] [*]

In general, the [@], {@NON} and [@ATT] keys can be used again after the channel number to modify the behaviour of the patched channel:

[1] [@] [1] [@] [80] to proportionally patch channel 1 (patched to dimmer 1) to 80% -ie. so that the dimmer's output will never go above 80%

[101] {@NON} [2] {@NON} [50] to set 50% as the level at which channel 2 switches dimmer 101 to full (over-riding the default level set in the SHOW SETUP screen) [2.201] [@ATT] [3] [@ATT] [15] to set the scroller of channel 3 (address 201 on DMX stream 2) to be a 16-frame (15 plus frame 0) scroller, again over-riding the default number of frames set in the SHOW SETUP screen. If you've already patched the light, you don't need to type the channel number again:

[101] {@NON} {@NON} [40]

The {CHAN>} patch sub-menu gives you more options for dealing with channels. {DELETE CHAN} we've already seen. {RENUM CHAN} is invaluable if you decide that the light you had called channel 1001 would be better known as channel 1. Rather than having to change the patch then re-plot all of the cues, groups, subs and effects (either manually or by using AUTOMOD), you can do it in one go: [1001] {RENUM CHAN} [1] [*] [*]

Provided channel 1 doesn't already exist, all the changes will be done for you.

This same sub-menu also offers the functions {ADD SHAPE}, used for adding the extra attributes used by the console's Dynamic Shapes - see the Winter 2002 newsletter - and {CLEAN ATTS}, a function which will remove any stray, unused attributes that are no longer patched to anything.

Back to the main patch menu, then {SET>} brings more options. {.DMX/OUTPUT} lets you chose whether you see the dimmer numbers/ DMX addresses in the format '513' (which will usually be the first address on the second stream of DMX) or '2.1' (which is the same thing in a more human-friendly form!). You can always use either format

when entering addresses, ie: [513] [@] [1] [*] and [2.1] [@] [1] [*] will achieve the same thing.

{LIVE=} and {EDIT=} reflect the fact that the console contains two patches. They are called Patch 1 and Patch 2; the 'status' box in the top-right of the patch screen will usually say 'Live 1, Edit 1', reflecting the fact that you are editing patch 1 and patch 1 is also the patch controlling the output. Pressing {LIVE=} and {EDIT=} will toggle to the other patch. This is the first thing to check if you either can't see channels you're sure you patched earlier on-screen (you're probably editing the wrong patch) or the patched channels don't seem to be controlling the lights properly (you're probably using the wrong live patch).

{SET DISPLAY>} lets you decide whether you want to see the patch in DMX address order or channel order; the other options are for use with fault-reporting dimmers. And {COPY/SWAP>} is a great but under-used menu for making block changes to the patch. For example, if your dimmers 1 to 24 failed and you had to move all of those lights up to dimmers 401 to 424, you could just go:
[1] [THRU] [24] {MOVE PATCH} [401] [*] [*] and have the console do it for you in one go. As their name suggests, {SWAP PATCH} will swap sets of dimmers, while {COPY PATCH} will copy one section of the patch to another.

If you need to control dimmers directly, bypassing the softpatch, you can do so using the [DIMMER] key in either LIVE or PATCH:
[DIMMER][1][@][80]
will set dimmer 1 to 80%; [NEXT] and [LAST] will then step through adjacent dimmers one at time.
During this, the warning 'DIMMERS UNPATCHED' appears to remind you that you are bypassing the softpatch. To get things back to normal don't type:
[DIMMER] [1] {@] [0]
since that would set dimmer 1 to 0% (- a useful way of holding a problem light out), but rather type:
[DIMMER] [1] {RE-PATCH}

or, if you wanted to return every dimmer you'd controlled this way to normal operation, either [DIMMER] {RE-PATCH} or the fractionally quicker [DIMMER] [DIMMER]

An Update for the Civic Theatre in Johannesburg by Tat Wolfen

Who said culture was dead? On the contrary, theatres around the country are seeing bigger audiences flocking to international and local productions, and the leading lady of them all – The Civic Theatre in Johannesburg – is gearing up for an even brighter future. When Bernard Jay took the stage as CEO of the Civic Theatre not many would have wished to be in his shoes. What could be done with what was perceived to be a large white elephant. Until recently the complex had been living in the dark ages with little investment.

Determined to be at the cutting edge of theatre technology, the Civic has begun upgrading the main Nelson Mandela Theatre with state of the art equipment. Dan Riley, Electrosonic's Product Manager for Strand, and Bruce Schwarz, who is responsible for Architectural Lighting at Electrosonic, were approached by the Civic Theatre to assist with the upgrade.

First on the new equipment list were the dimmers controlling the stage lighting and those controlling the house lights. The challenge in replacing them was to fit new dim-

mers into the existing installation without interfering with installed power and cabling.

Dan's solution was to use the Strand SLD 90 racks as the existing 7 x 72 way Strand EC90 racks were of a similar size and configuration. The Nelson Mandela Theatre required 500 5kw dimming circuits, so Dan opted for seven 96 way racks populated with 72 circuits each to make up a configuration of 500 circuits.



A view of the Nelson Mandela Theatre

This was a good choice as they matched the circuit cabling leading into the dimmers. The houselights also needed to be controlled by the Strand 520i lighting control desk's DMX signal. Bruce's solution was to convert the DMX to an analogue signal and, via an SDIMM module, control the rack by both the DALI and analogue signals simultaneously.

The main theatre has a high turn around of performances, so the Electrosonic installation team comprising Robert Izzett, Joshua Cutts, Muller Steyn, Jason Johnstone and Philemon Maepa were allocated only ten days to carry out their plan. Everyone worked under extreme pressure to remove the existing seven racks and house light dimmers and replace them with the new, updated equipment. The deadline was successfully met in time for the curtain to go up on the next scheduled performance.

The show must go on ... and so it will, better and brighter than before!

The Strand Newsletter is published electronically four times a year. If you received a copy of this newsletter from an associate and would like to receive a copy directly please email us at:

newsletter@strandlight.com

New Dimmers for the English National Opera and The Coliseum

In 2004 The London Coliseum, home of the English National Opera, celebrates its centenary. A full restoration has recently been completed to return this prestigious venue to its former glory: a return to the original 1904 auditorium colour scheme with an extra 40% more public space and bringing affordable access to the opera to the general public

Strand Lighting products are found in all major West End venues. The Coliseum itself has successfully used Strand dimmers for decades. This shared history most recently involved beta testing of new systems in 2001. Consequently when the ENO were looking to refurbish their dimming and control systems and increase the number of channels from 350 to a massive 1280, Strand's new SLD Dimmer Racks became the ideal choice.

"From the start of this project the intention was to retain the ENO's existing Strand 500 series control system upgrading it with the latest operating software and increasing the channel/attribute count. When Northern Light offered networking and the new high density SLD Dimmer Racks from Strand Lighting we had the opportunity of presenting the Client with a complete Strand dimming and control system to meet our specification. The SLD dimmers were a brand new product when the decision was made to install them with significant improvements being made between the lighting package going out to tender and the contract being awarded. As you might expect there were some teething problems which Strand and Northern Light have worked to resolve. ENO now have a complete Strand dimming and control system with an up to date specification running the latest software." Steve Roberts, Carr & Angier, **Theatre Consultants**

Northern Light, an established Strand distributor, supplied and installed the systems. They gave special consideration to the phasing requirements of the installation. Simon Cooper worked with ENO staff to find the optimal solution.

Dimming Equipment Now one of the largest installations of Strand SLD Dimmers world-wide, The Coliseum has been installed with fifteen 96 Way SLD Dimmer Racks making up a configuration of over 1350 circuits. House light dimming is controlled by a further 96 Way SLD Dimmer Rack with a total of 89 circuits. Circuit breaker status is monitored on 15 single 10A Dimmer modules, marked in red for easy identification.



Rob Bridges, ENO's Head of Stage Systems said, "We will make full use of the Reporter facility to monitor house light loads preventing the need for daily lamp rounds on the 2500 house light fittings"

Custom Controls

The existing 510i Show Controller unit was refurbished upgrading it with state of the art resources including 1.2GHz Pentium III processors and 256Mb of RAM. This together with a further 510i Backup Unit and a custom 550I Series Control console with additional features provide virtually seamless control. An early decision in terms of system design was to embrace Ethernet technology using Strand's ShowNet system and to lay the foundations for the new ACN protocols.

Future emphasis will be placed on the networking capabilities of the Strand dimming and control systems, building on the comprehensive foundation now in place.

ENO Equipment List

Production Control System:

- 2 Custom 510i controllers, each fitted with Pentium III Processors and 256Mb of RAM
- 1 Custom 550i Control console with extra keypad
- 1 ShowNet File Server
- 1 SN102 2U High Rack Mounting Network Node
- 2 SN103/R 1U High Rack Mounting 4 port DMX Node

20 SN110 Rugged remotely-powered dual port DMX node using PoE technology

2 x SN110 Dual custom network nodes

Dimming Equipment:

15 SLD Dimmer Racks fitted with: Dimming Modules

466 x Dual 15A Dimmer Modules with RCD

124 x Dual 25A Dimmer Modules with RCD

14 x Single 10kW Dimmer Modules

50 x Dual 15A Relay Modules with RCD

23 x Dual 20A Relay Modules with RCD

House Lighting Dimming 1 x 96 Way SLD Dimmer Rack

Four Rivers Center for the Performing Arts

The Luther F. Carson Four Rivers Center for the Performing Arts, nestled in downtown Paducah, Kentucky, is the latest collaboration between Artec Consultants Inc and Zeidler Partnership Architects of Toronto. Artec provided design and planning services for the Center including theatre planning, theatre equipment, sound and communication system design, in addition to comprehensive acoustics consulting, financial analysis and fundraising counsel. The production lighting system contract was awarded to Vincent Lighting Systems of Erlanger, Kentucky.

Since its inception, the Luther F. Carson Four Rivers Center's mission has been defined by the needs of the people it serves. As a gathering place to celebrate creativity and diversity through the arts, education and outreach, the Center requires superb staging and flexible acoustics for a wide variety of entertainment, cultural and education programming. The Center boasts a flexible 1800-seat proscenium theatre designed for a wide range of events from traveling Broadway musicals and symphony orchestras to pop music concerts and lectures.

Additionally, the facility houses a 225-seat multi-function room, "The River Room", which will accommodate events such as small-scale music recitals, informal theatre events, banquets, social dancing, corporate and civic meetings. This flexible space with breathtaking river views features a fully suspended stage floor and a walkable wire rope grid overhead for complete technical access to ceiling lighting positions.

The ten-story-tall stage house has the capacity to store performance equipment for large-scale productions, including line-sets for scenery, lighting and curtains. An area below the front of the stage houses a sophisticated control system that allows a stage extension to adjust to different levels and provide for various configurations, including various sized orchestra pits, additional audience seating, or an extended stage surface.

Dr. Joel E. Rubin, Artec Principal Consultant and designer of the Four Rivers Center Production Lighting System, said, "The Artec design for this production lighting system will accommodate the widest possible variety in performance types, from one-person shows to symphonies and to the extensive theatre and musical attractions which the Four Rivers Center will attract." The dimming and control package was provided to Artec's specification by Vincent Lighting Systems using Strand Lighting equipment. Strand CD80 Supervisor dimmers were chosen for the Main Theatre as well as a Strand 520i Control Console to provide high-level microprocessor-based control for the performance lighting.

A Strand Lighting ShowNet network distributes control data throughout the Main Theatre over a standard TCP/IP Ethernet network, providing maximum flexibility of control.

In the River Room and Lobby Area, Strand Lighting provided their architectural line of digital products: Digital Environ dimmers and Outlook control stations.

"We are honored to have been a part of this process, and have worked very closely with the Project Team to design a center that truly fits the needs and interests of the community. We are proud to have the Luther F. Carson Four Rivers Center join our worldwide family of venues. We look forward to attending wonderful performances in Paducah for years to come," commented Artec Principal Consultant and project manager, William B. Allison III, ASTC.



Strand SL spotlights over the auditorium

Dr. Joel Rubin, an accomplished professional, had this to say regarding the system and services provided by Vincent Lighting: "[The company] performed in a highly-skilled and professional manner, with the supply of systems that met or exceeded our specification requirements. They gave very good attention to the project in all stages from the initial supply lists to the various drawing submittals. Drawings and services were furnished promptly throughout the entire course of the project. During the field installation Vincent [Lighting] personnel could be counted upon to be on-site as needed, usually anticipating the project needs. The entire Vincent [Lighting] package of sales, service and Strand Lighting equipment was of exceptional quality and delivered in a very professional manner."