

# Lighting ASOUNG Property of the Lighting ASOUNG Property of th

www.lsionline.co.uk



# Transformation

L&SI reports from the RSC's new flagship venue



On Tour: Sting
Complete with orchestra



The Skills Chasm
What is the way forward?

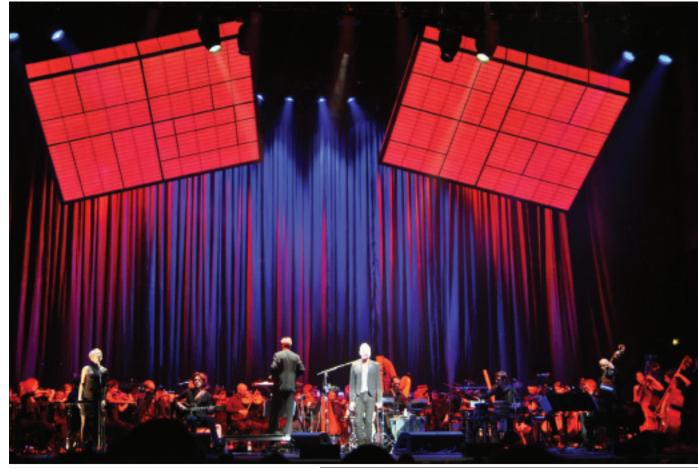


The Effect of Delay Pros. cons and tools . . .



Ronnie Wood
Live and loud in London

PLUS . . . Lighting the Enchanted Forest • Soldaat Van Oranje (De Musical) • China's Guangzhou Opera House LDI in Review • Politics & Religion in Southeast Asia • Maintenance Contracts • Audio File - and more . . .

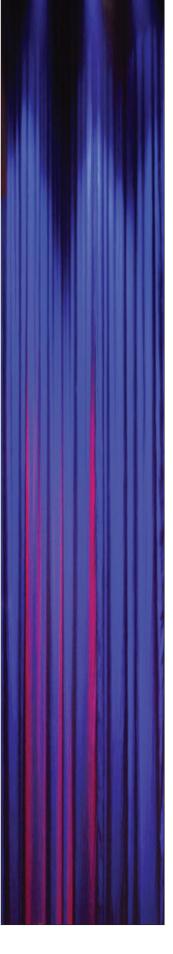












# STING

words and photography by Steve Moles It's easy to imagine the scene: it's 2007 and the world's leading promoter wants a famed three-piece rock band to reform and tour the world. The deal is cut, the band plays to packed houses and a million youthful memories are rekindled. On the bargain side was the solo tour with orchestra . . .

This may or may not have been the case: Sting has been moving towards a more musically textured path his entire career, most recently with his Elizabethan Lute tribute to John Dowland, and now this. Peter Gabriel did something similar last year (and is in fact touring the same show in Europe as I write), but unlike Gabriel's borrowed songs, Sting has rearranged his own material here, and you know what? The punters loved it. For the more musically literate this will come as no surprise whatever the charming simplicity of his early offerings with The Police, Sting's melodic song writing has always concealed difficult and challenging time structures; that's the essence of his magic and why his body of work

The orchestral show presents a minimalist face, and under the guiding hand of stylist Robert Molnar draws upon offerings from contemporary artists (Sting's children Mickey and Kate, and Mat Collshaw from the UK among them) as visual touchstones amidst the 27 songs we hear this night. Their impact is muted, as is much about this show. Where rock shows push your face into the meal 'til you can eat no more', this show makes you work for your food, is satisfying, yet contrarily still manages to leave you hungry for more.

# Lighting

My dear friend Danny Nolan would be the first to admit he's been tonsurially challenged for several years now, yet his face betrays a youthful enthusiasm that burns as bright now as when he was third man on my crew for Tina Turner more than 20 years ago. This is no better exemplified than by the animation in his voice as he explains the workings of his design - already six months old on this one-year stint, yet his ardour is undiminished.

Nolan met me at the loading dock of the Apollo, outside the renowned Apsley Cottage, and after we'd exchanged hugs he launched into the show. "We haven't been able to get anything like the full rig in here. That's been the nature of the tour; we've played stadiums, arenas, theatres and bits of the US shed circuit: we even opened the new Poznan stadium in Poland and will be playing the Arnhem Stadium for their Classical Music festival."

Will we still get to see the essence of your show, I asked? "Oh yes, for an arena-based show I use very few lights, we've put most of them in." 'Most' is misleading, Nolan has just 27 VL3500 Wash and 12 VL3000 Spots on the tour, "but the Vari\*Lite VL3500 Wash FX is just the most fantastic light. It's my light of the moment." You can hear the enthusiasm already, but we'll pause here for a brief rig description.

Nolan's plan is founded on one bold directive from Mr Molnar, that there should be concert hall style acoustic reflector panels above the stage. "I was very concerned that they would block off many of the available lighting positions," said Nolan. His response proved a defining concept: "Let's put LED video in them and use the panels as lights." In full configuration there should be three panels above stage, but for Manchester just two could be squeezed in: Nolan kindly provided some photo examples.

The other device Nolan injected was also in response to limited light positions: "I wanted something like a pantograph that could reposition lights vertically when the panels are lowered, but I wanted something more visually pleasing," he said. Again, Manchester audiences were denied these devices as space did not permit. Quite beautiful to behold, outwardly Victorian mechanical at its most elegant; the articulated arms are in fact a smooth, high-tech offering from Upstaging (main lighting contractor, with Neg Earth covering the European



tour). "They had already developed the highspeed wire winch system for multi-purpose applications, but they have made a great job of the arms themselves," said Nolan.

The Vari\*Lites are deployed front and back truss, with pairs of VL3500 Wash on the arms, just six Wash on the floor at the back to up-light the gathered black silk. Nolan and production director Charlie Hernandez have designed a multi-level riser platform for the orchestra (again too large for Manchester) that has on its front panels mimics of the LED panels above. "Tait Towers built the risers and flown panels for us. The panels are very slick, Tait's found a perfect diffusion polycarbonate to put in front to protect the LEDs. It stands off by about four inches and blends the LEDs into a visually coherent and smooth image. They've made the panels very quick to rig, each one splits into a dolly; all three can be rigged and connected in about 20 minutes."

As it transpires the panels have three functions. They run the video footage created by the former mentioned artists, and take live camera feeds directed by George Elizondo. They also function as a light box, as was Nolan's original intention, and though the Nocturne V9 LED panels are perfectly capable of pumping out very high levels, Nolan has them reined in at 30%, "any brighter and the video just looks out of balance." As such they are a soft-light and nothing more. Fortunately, Nolan's beloved VL3500s have such a zoom range that he's able to light the stage and orchestra more comprehensively, from admittedly tight angles, than he originally imagined. Their third function is counter-weight to the stage full of musicians below, and in this respect they are Molnar's best conceit.

"There are two sides to the design - my lighting, and Molnar's input, which was to make it stark, almost Bauhaus." Molnar did design costumes for the orchestra but the effect was too uniform, so black evening wear has replaced them. "From the beginning I've followed Molnar's lead, in

that less is more; there are fewer cues for every song than I've ever used, often I'll just create a scene and sit with it. That said, the evening has its own musically dynamic moments and it's nice to paint a lovely picture and then just respond with the subtlest of lifts." If nothing else, I commend Nolan for his restraint.

He continues: "With the boxes I sometimes work it so it does appear that the boxes are producing all the light on stage; when the risers are in place so the LED fascias come into play as well, and the effect is convincing. The fascias receive the same feed as the boxes above, my one contribution to the content was to record a face-on image of an illuminated Molephay and scale that up to make the boxes appear as giant floods," a simple illusion that proves visually very effective.

"But generally I need to maintain light levels for George's cameras, so normally I'm teasing in the VL3500s somewhere, even if it looks like the boxes are producing the light. I do a lot of back-light work; the six VL3000 spots at the back are rigged on fixed drop pipes to give me some lower angles from behind, and of course the moving arms

allow lower angles. The arms are deliberately curved, it makes the stage look a lot more organic, and to highlight they have PixelLine in the truss above them, just to catch the top edge and give them a touch of colour. The gathered black silk backdrop is a key element, enabling both the moving arms and the boxes to appear as if floating above stage."

Besides the PixelLine, Nolan has a few other instruments dotted about, including two Lowel Omni lights at the feet of guitarist Dominic Miller and backing vocalist Jo Lawry and a set of four Headlights, an approximately 60cm square panel of white LEDs built by Upstaging and used, as designed, as an audience blinder. "How I ended up using the VL3500 Wash FX is also down to Upstaging. My original idea was to use Barco/High End Showguns, then I went to Chicago and John Huddleston asked, had I seen the new VL? We made a comparison, they weren't brighter, but the 3500 can go wider and tighter. In fact, maybe they are brighter - when I run them as keylight I have to back them off -30% or more so they don't blow the video."

Nolan, formerly a keen exponent of the Hog III, has succumbed to the GrandMA: "Because we play so many different venue types I'm constantly re-tasking the lights. On that score alone it makes the MA the best choice because it makes it so easy; the clone function is superb. The desk looks a bit old now, but it does all I need."

# Video

Nolan has one Catalyst which sits alongside Elizondo's own device out with the PPU. In this instance it's in the 45ft trailer that usually carries the Nocturne video system rig parked outside the backstage door. "I'm often way off-stage, in the US for the shed leg of the tour we even used a semi-trailer fitted with  $A/C\dots$ I became one of the most popular people on the tour." Elizondo, a handsome man of indeterminate middling years, is both charming and, like Nolan, an enthusiast.



"I have six cameras in total - two remote, four operated. Danny triggers the Catalyst from out front. The content is all commissioned by Sting; there's a couple of generic pieces, when to bring it in was all worked out at rehearsals. Sting left it entirely to Danny and I as to when and where to bring IMAG into the show. It's a good mix, maybe 50% of the show, though when we're indoors like this without the side screens it's less, so that the stage isn't overwhelmed with images. I also change the camera work when we're inside: normally there would be a lot more close-ups for the distant audience, obviously that's not a need indoors, so we re-frame a lot. There's a fine line between IMAG and the artist, that's one reason why we keep all the images on the boxes in black and white, at least until the encores."

Elizondo has a second Catalyst in the rack; does he treat the images much? "Not really, I do make it a little hotter; in black and white it looks nice if you blow it out - a bit Ansel Adams." Exactly so.

Nolan mentioned Elizondo uses a Vista Spyder, and wished he'd had one for the Police tour. He says: "It's a very good vision router, allows you to map any input to any output. It does require a bit of programming but it's easy and it's solid." The destinations aren't as many as on the Police, but if you

count in the riser fascias and side screens then there's quite a wide tableau across which to paint a coherent visual picture.

"I've done orchestras before," he continued, "but this is a hybrid and it's taught me something, that aspect of who comes in where. I can't sight-read music, but I'm learning, so I do know the clues as to when they're coming in the next bar. It was a learning curve: there are 45 musicians out there, normally I'd have 10 cameras for that many, and a sight reader to call the solos. The camera men have also helped, they've learned with me."

Has that made it a tougher call than his more regular rock show work? "No, it's a blast. I like the ebb and flow, the orchestral element is very beautiful and, of course, you get Sting on top."

Such is the historical context of the business that it's not often I get to meet a mix legend on tour: gone are the days when Bruce Jackson twiddled a knob, though I note he still gets works as sound consultant for Barbara Streisand just to keep his ear in. But Howard Page was the last man I expected to see on this show. There are two reasons for that: firstly, Mike Keating has mixed Sting for years, and was just about the only familiar

face to survive the cull when Sting switched management companies (perhaps a decade ago now), and secondly, because I had met Page in Lititz, Pennsylvania only 14 months earlier, when the legendary Trip Khalaf (currently on Roger Waters) introduced him as Director of Engineering at Clair Global. That said, I did have reservations; a great rock engineer of the old school who drives instinctively from the desk (usually analogue) and eschews most off-board devices, he is not the obvious choice for an orchestral show. I asked Page the obvious question: "I got brought in to do his show at the Metropolitan Opera in New York; Mike [Keating] wasn't available. I started by getting the stage level from the electric instruments turned down. Then I waited till sound-check for the orchestra to play so I could attain what was the natural acoustic level, then I brought up the groups on the desk to barely above that level; so in effect it was very live, as opposed to amplified. I ended up mixing the MET and the shows at Durham and New York Cathedrals: we just gelled." Which is a very gentlemanly way of saying Sting probably had the same reservations.

Looking at the stage design, it occurs that the acoustic reflector panels, as envisaged by Molnar, are exactly that, even if they don't have the mass of those found in classical concert halls. They must affect the stage



# Stings & Arrows

# Lights

- Upstaging's high-speed winch system used by Nolan to actuate the arms is known as Speedwire, and as the name suggests, it facilitates the fast movement of objects in space. "Good pieces of kit," said Nolan. Movement of boxes above stage is all controlled from a VariLift system run by lead rigger Mark Knowles.
- Nolan does use followspots, just two in the house for Sting and solo pickups. Phil De Boissiere, a man I thought had long since hung up his armoured battle shorts and retired to Wales to catalogue his collection of pressed wild flowers, being the crewman responsible. "Danny's very fussy, fortunately not as fussy as me," he said.
- Nolan had this to say about artist relationships: "I want to underline how important the LD's relationship with the artist is. If they are a concerned performer and are able to express clear ideas about how they wish to be framed then do not underestimate your value to the artist in realising that idea. They're alone on stage and whatever you do that fulfils them is more than just a job accomplished. It is a psychological prop of significance.

# Sound

- Page on live sound: "The artist always signs off on the CD before it goes into mass production. It should be the same for live sound. Often it's too loud, the dynamic is lost and the audience is brutalised. It doesn't have to be like that; many groups would be horrified if they heard what's going on out front."
- "Shirley Bassey came to one of the shows we've just done at the Albert Hall, she told Sting the microphone wasn't right for his voice, and told him exactly what wasn't right. 'Oh, that's what you mean,' he said to me. Would he change it now? 'No, we'll deal with it'." It keeps Page on his toes if nothing else.

# Video

- Elizondo uses a Nocturne-built control console with built in fold out Kayak switcher, with pop-up widescreen LED display with multiple monitor windows, "so fast and easy I put it up and take it down myself."
- Tomorrow We'll See, a poignant song about a male transsexual prostitute, showed up the one shortcoming of the box screens: each time they move there is an element of sway when they stop. It was especially noticeable in this song, something that could easily be addressed by Total Solutions Group's RSC LightLock.

The tour returns to the US shortly, then Japan and Australia in the New Year.

acoustic and hence the environment which Page is trying to project into the auditorium? "Not as much as you might imagine," he replied succinctly. "That's due to close mic'ing and my secret weapon is the DPA 4099. I'm using them on virtually everything - with Schoeps for the harp. They sound beautiful, just magnificent at picking up the instruments." Page evangelises for the 4099 as ardently as Noland did for the VL3500. "And unlike earlier versions, they don't present you with that screech. So I'm not subject to the environment or reflections from the panels above, instead I'm getting much more body. I've also got light constraints on the monitors and I do remind the electric band about levels every couple of shows." That last comment I thought interesting: he explains: "All musicians get excited, a regular reminder stops it becoming an issue and no one is offended."

What of the mix? "For me, the interest is in the dynamic between orchestra and band. Sting is singing whisper ballads with powerful emotional content. So I'm going from whisper quiet to full-on orchestral rock. Then there are the arrangements, he's chosen some lesser-known songs, ones that would never work in the rock concert environment," Black Seam and Russians from the album I Dream of Blue Turtles being on display this night, and beautifully rendered.

"Looking at the PA, I'm using Clair's I3; not a system that will have been seen much over here. Its Clair's smaller line array. It projects with super hi-fi quality and with a wider dispersion than a typical 90° line system. It's much more musical than a system like the I5; that wider Q means you're not crushed by the compression distortion of a narrower system."

That's a real on-the-chin assertion from Page: Clair Bros build to purpose, the rapid implementation of the I5 indicating how quickly they addressed the shortcomings of the I4 for rock concerts; readers may recall my report from a Sting concert in Lille right at the launch of the I4 when engineer Keating berated it for the lack of attention to subs (see *L&SI February 2000*). It is merely a measure of Clair's reach and massive inventory that they now have systems such as the I3 to address a more refined musical genre.

"The I3 will work at high SPLs, but I don't need them, typically this show is between 90-102dB. I go into the dynamics of each song, and then track them." Page cleaves to this mantra more than most, though 12dB is fair old range redoubling power from one level to the other, but just like Ray Furze would always gently turn down the vocals when a boy band audience became too raucous, so Page will moderate levels,

compelling the audience to listen. "One minute the orchestra is going crazy, the next he's telling an extended story about his father, or a cello solo pops out of the score. Sting always scored it to be amplified, the key is how amplified - that's what I try to get across to the audience. This is a different facet of Sting we're defining and we shock them at just how different it is."

Page is using a Studer Vista 5 in the house, admitting: "I'm biased. In my role at Clair Brothers I was involved in advising Studer on building a live console in the elements of touring and functionality. For me, it's the digital desk closest to analogue I've ever heard and you can do anything on it. It's not constrained to layout, or number of groups, or number of outputs - architecturally it's totally flexible.

"For this show I've set it up so the first layer addresses everything that ever solos, and all the major mix groups, and the lower bank is fixed sections of the orchestra, first violins, second violins etc and bring them all to VCAs so they're accessible. There's also the ability to bring soloists above control of their group level. So you can set it however you want. Then I work overall control of the orchestra relative to the group, relative to Sting and the backing vocals. But the key is discipline; no one plays too loud in a malicious way, but it happens, so you have to tell the percussionist when they hit the head twice as loud as they need to."

Page doesn't deploy subs. "Working with these stage levels, the mix comes out the way I want it and the bottom end is matched to the rest of the orchestra."

Page did elaborate on the over preponderance of sub energy in modern rock concert mixing: we won't go there. But as an indication of his earlier mantra on listening, I rarely lost contact with the cellos and basses throughout the performance and the timbre was delightful - which I guess is the improvement in the DPAs to which he referred?

This left one overriding question, what was an elder statesman of concert touring doing on a 12-month tour; surely you don't climb onto a bus each night? "I'm too old for that. But to answer your question; if you're going to tour after so many years, he's the guy. A huge star, he's at a position where he doesn't have to prove anything to anyone anymore. From a man of his stature to get the level of communication he gives . . . well, the audience has no idea."

It was my observation that Sting was in fact far more candid and chatty to his audience than I've ever witnessed, and I've seen him a few times. As for the audience, I think actually they had more of an idea than Page

thinks. While many were, as Page indicated, shocked by the presentation, they quickly regained their momentum and responded as ecstatically as they might at a rock show.

## **Monitors**

Fortunately, for your tired eyes, Ian Newton is a man of few words. But don't underestimate him; I've seen him with Toto, Mike Oldfield, Madonna, Oasis, Sting and the Police: his skills are much sought after. "It's pretty straightforward," he says. "I have a dozen Yamaha self-powered MSP3s, little hotspot monitors which cover the various zones of the orchestra. None of them listen to themselves," which says a lot about prevailing stage levels, "usually they want just who they can't hear; the strings on stage right (violins and violas) get the bass and cellos (situated stage left) and viceversa. I have low level Perspex screens to isolate the violins from the percussion section of the electric band. The two band percussion players are on hardwire in-ears, Dominic Miller (guitars) and Jo Lawry (BVs) have wireless systems, all Sennheiser G2, likewise Ira Coleman on bass, but he uses one ear bud and has a Clair 12AM wedge. Sting is the same, one ear and a wedge." That's not normal for him? "No, the two monitor thing has evolved over the tour; he likes to hear the room and doesn't need the isolation to pitch." No wonder he looks so happy on stage. "His mix is split, all the orchestra and solos down front on his wedge." Newton admitted he hasn't learned to

read a score to pick out the solos, "but like normal touring, you soon spot them coming."

Sting has a big, retro, 50s-looking mic, "a Shure Super 55. He chose it entirely for looks. It's designed as a vocal mic and gives me what I need, and he can sing off axis and it still gets through." Page joined this conversation when I asked if they'd contemplated sticking a Beta58 or maybe a 105 Neumann capsule in it. "We tried several different 50s style mics to begin with; but he went with this. Shure strongly advised against trying another capsule, they told us the chamber was very deliberately tuned for this cap'. It's busy inside, what with the integral windsock. We took their advice. It's a compromise and I've tried to persuade him to use something better but he always comes back with, 'we'll deal with it', so we do."

Newton still has his trusty Yamaha PM1D perched at stage right: "Still does the job and they've been around a long time and they keep going. I've never seen one fail." Can't argue with that.

On first take this is in essence another way of listening to the same stuff. Refreshing for the artist, it is, if nothing else, thought-provoking for the audience. But stay a little longer and this is an altogether much more fun night out than the one you were expecting. Sting and orchestra it isn't - because this is a whole lot more









Clockwise from top left: Video director George Elizondo. Howard Page, FOH sound engineer. lan Newton and his daughter Jenny. Lighting designer Danny Nolan.



CRMX leading wireless lighting control - DMX, RDM, DALI and Ethernet 8 reasons why CRMX Nova Flex won the PLASA Award for Innovation again in 2010:



LumenRadio • +46317728084 •

- Input any protocol output any protocol: DMX, RDM, Art-Net, Streaming ACN, ETCNet, Strand ShowNet, Pathport and more
- · Configurable as transmitter or receiver
- Automated Cognitive Coexistence
- 2.4 & 5.8 GHz dual band option
- SuperNova RDM Controller included
- Synchronization, error correction, encryption
- Up to 1000m native range
- The industry's lowest latency at 5ms

LumenRadio