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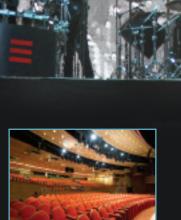
Jay-Z On Tour

L&SI visits the Birmingham LG Arena

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On first examination, this tour looks more like a festival traipse round Europe. As I trawled round the various departments sound, light and video, each had their own particular aspect of chop and change to report. There wasn't a lot here that was fixed, at least not in terms of suppliers; frankly I was a little confused. Later, when I snatched a few minutes with visibly beleaguered yet (under the circumstances), remarkably indulgent production manager Bobby Schneider, he managed to unfold a clearer picture.

"On mainland Europe we used a different set of vendors for sound and lights from here in the UK. Video from XL stayed with us for there and here, so there's an element of mix-and-match. Clair Brothers is our current vendor for the US tour and they were principal for Europe where, for example, when we played Paris we used an I5 rig. Lighting came from Flashlight in Holland. Here in England where we have just two shows - well actually three - we used Britannia Row for sound and the lighting comes from Neg Earth." And that third show? "Well, from here we go to the Isle of Wight Festival, so we just take our core show, but it's tight because we then back-to-back with Bonnaroo Festival in Tennessee." How is that possible? "Well, we put everyone on private jets, Eighth Day Sound provide the audio for the festival, Atomic Lighting out of Pennsylvania will provide any extra lighting we need."

It struck me driving back from Birmingham LG Arena that this in some ways represents the touring model of the future. On the face of it, Jay-Z's tour of Europe is not so far removed from that of bands on the C circuit who use mostly the house rig at the various Academies around the UK, augment lights and video in particular, occasionally sound, and present a show identifiably their own. This is just larger scale: I counted 14 trucks (Transam and Stardes) in the parking lot, another one outside the production office door (there could have more on the opposite side of the building where the buses park up, but I never got the chance to look).

So Jay-Z is playing a full production arena show but picking up gear when it suits. As a logistical exercise this is complex to handle, hence Schneider's slightly ragged appearance, but in terms of truck miles and fuel consumption it possibly makes sense, though I couldn't find anyone who'd actually done the math.

However, considering the announcement of impending National Financial Armageddon made by our new government only the day before (8 June), there's every reason to expect the Treasury to tolerate (let's say encourage) a certain amount of inflation in the coming years to ameliorate the burden of debt; so fuel in particular isn't going to get any cheaper. That, by the way, includes electricity, so I think you can expect promoters to look ever closer at the scale of presentation spectacle when making their ticket calculations. And will punters have the same levels of disposable ticket buying cash when all this happens?

Just to put a rosy tint on these musings, I offer the following: standing outside the LG Arena watching the crowds arrive it was obvious that they split into two distinct groups, those on the shuttle busses from the NEC car parks, and those walking in from Birmingham International railway station. There were a few foreign voices, I saw three girls from Glasgow who'd travelled down, but then as I said, Jay-Z only played here, Manchester and the IOW Festival. Predominantly, however, the punters' accents were from Birmingham and the surrounding Black Country. In that respect, tours might look closer at their audience demographic, becoming more regional. We could, for example, see a resurgence in gigs at the Sheffield Arena to cater to the Leeds/ Dewsbury, Wakefield area, rather than the current model where most large productions visit Manchester Arena and expect punters to cross the Pennines. That's what I imagine Live Nation have done here - looked at Jay-Z's audience profile and targeted two of their highest urban concentrations in the UK.

Video

This is a two-handed trick in terms of operation; backstage Dirk Sanders directs cameras, while at FOH Drew Findley is the screens director.



Sanders says: "The video breaks down into distinct parts: the LED screen is made up from modules of XL Video's Pixled F15, the 15mm pixel pitch hi-def screen. There are also side screens with Barco HD20 projectors, also from XL Video. The cameras, all Sony hi-def cameras, nine of them, also come from XL, as does the PPU. Control back here is interesting - the LED screen is a wall in a cityscape skyline; as such the towers that make up the skyline are physically in 3D, we've actually built the tiles to render a third dimension. You can play on its shaped surface and address each facet individually if you wish. That's done through an Encore Control System with custom interface by Control Freak (CF) Systems."

The CF custom interface uses DMX protocol to assign Encore image processing tools and all video layers to any dimmer position on the chosen console, in this case a grandMA. "There is some IMAG used from time to time on the centre screen, Drew controls all that from front-of-house using the grandMA to run the CF Encore, and the five M-Box media servers we also have here from PRG. Drew can take my camera cut, or pick from any camera feed he wants. Camera-wise, I have five cameramen on stage or out front, and four remote-controlled cameras dotted about the stage and overhead; I have an operator for each of them back here with me. I use a Panasonic Switcher (AV-HS450N) that has built-in multi-view monitoring which has proved to be a Godsend because it's so compact; it's very useful when we're doing festivals." If you're not familiar, multi-view segments a large screen display into multiple small-format monitor windows; hence saving space.

Sanders continues: "This is a very complex show. The big challenge is in the framing, because entire chunks of the raster aren't visible." You mean because what your cameramen frame is applied to multiple tall thin vertical (portrait) screens that comprise each city tower? "Because of the combination of hi-def and that particular screen's structure it's essential to map to the last pixel. In effect I serve two masters, the audience view to the side screens, and the custom-shaped LED wall."

"I started working with Drew in 2008; this is my first tour as camera director, my background is actually media server programming - through Drew does his own for this show - but I'd work a lot with

Control Freak. The Encore Bridge," (both Sanders and Findley refer to the CFS interface between DMX control protocol and Encore as a 'bridge') "runs live, direct from the grandMA console, so yes, a lighting desk controls router, Encore and M-Box: the side screen sources also feed from the Encore. That allows a unified, fully integrated approach. Some of the content material is run to Time Code, that can come from either Pro-Tools or Ableton [DJ Software] but Drew runs a very live show in concert with Patrick on lights."

Drew Findley holds the title Director of Screens, though as Sanders already revealed, there's a lot more to his job than posting vision material to the proper destination. To begin, I asked about the preconceived content. Findley says: "I generate some myself and we've had made content from two main sources, UVA [United Video Artists] here in the UK, and Skitch TV in Brooklyn. I hadn't worked with UVA before and they've done a really good job; the cityscape in 3D was their proposal and it has been executed perfectly. In terms of specifics, the brief given to both companies was general, just guidelines about mood and feel for each song, just to see what they'd come up with initially. Jay would have input to that initial process - he sees the starting point, gives his impressions about what interests him, and then we let them develop further. I then maintain the interface between UVA and SkitchTV to Jay and his management; they might look in on development once more in the middle, again at the end. After that, I'm sort of a video wrangler if you like, in that I pull stuff out from different content designs and put it together with selected camera feeds, and then apply things from the MBox Extreme. To do that application of effects I'm looking to what Patrick does with the lights. Or maybe I have something specific in mind, in which case Patrick works towards what I'm doing."

Both Findley and Dierson (see below) speak with great animation when either of them ventures into this partnership aspect of their work. With quite a number of LDs keen to wrest control of video, it was nice to see both really enjoying and obviously benefiting from the collaborative development of the CFS system with Barco (Encore's owners) to produce an LD-friendly 'lighting style' controller for video. Two men on two identical desks operating wildly different systems; the synchronicity between them was palpable.









Findley continues: "Dirk has worked with Control Freak and saw how to build in the kind of flexibility we needed. Even on a show-to-show basis, things can change -Jay may come in and ask that we pull cameras off a certain shot, or take a new one. The CFS Encore and MBox Extreme system is able to respond to that; any combination will work. Although since last September we've made a lot of changes we have now fallen into a steady rhythm - but it does depend on how he plays and how the audience respond. There are few songs that run completely to time code, but even then we mix things in on the fly - a lot of blending in camera shots with content."

Does the 3D relief surface of the LED screen present problems to you when you are working in that responsive fashion?

Doesn't there always need to be time to consider the destination point? "We did do a bunch of tests, and yes, what we found is that for it to work everything has to be pixel-perfect - you can't bleed to the edges, it has to be exact to each tower. If the content doesn't trace the outline it doesn't look right. Also you can't make the view perspective correct from every seat in the room, but you can for the majority. The Pixled F15 is great; the shaped surface adds another element, and the Encore Bridge more than anything else enables us to do what we need to. Being able to create classes, presets - things like that, just doesn't exist in the regular Encore desk."

The control link between grandMA and CFS Encore system is over fibre, an Ethernet/Art-Net link.



Top, from left to right:

Video director Dirk Sanders; Andrew Findley, screens director; Lighting director Patrick Dierson; Kenny Nash (monitors) and Kenyatta "Kelo" Saunders (FOH).

Above: Production manager Bobby Schneider with production coordinator Jill McCutchan.



Equipment List

Lighting - Neg Earth:

12 x Vari*Lite VL3000 Spot

36 x Coemar Infinity Wash XL

18 x Martin Atomic Colour

18 x Martin Atomic 3k strobe

8 x Clay Paky Alpha Beam 300

2 x Clay Paky Alpha Beam 300

2 x DF50 cracker

2 x Spot chair - underhung - Black

2 x Robert Juliat Flo Short Throw Follow Spot

36 x Martin Stagebar 54

18 x Mac III Profile Lamps

2 x Grand MA Console

2 x Jem ZR33 Hi-Mass

3 x MA Network Signal Processor (NSP)

5 x I-Pix BB7 LED Washlight - 7-way

Sound

Audio Rent supplied:

Midas XL8 - FOH control Digisdesign Profile - Monitors

Britannia Row supplied:

Drive rack/s containing:

2 x Show computers

1 x Tablet

1 x Edirol interface

1 x Dante Returns

1 x Klark Teknik DN6000 analyser

2 x Dolby Lake Processor

FOH Speaker System

Main Hangs:

24 x L-Acoustics K1 elements

18 x L-Acoustics SB28 Sub bass elements

6 x L-Acoustics DV-DOSC elements

Side-hangs:

20 x L-Acoustics V-DOSC elements

Delays:

8 x L Acoustics V-DOSC elements

Front Fills:

4 x L-Acoustics ARC elements

2 x L-Acoustics dV-DOSC elements

Video - XL Video

All London Shows, Manchester and Paris: Custom 'Manhattan Skyline' LED screen consisting of 265 active modules of Pixled

5-camera HD system (Panasonic HS-450 Switcher, Sony HXC-100 Cameras with 2 x J86, 2 x J11, 1 x J22 lenses)

4 x Sony BRC-H700 HD Robocams

Tour Suppliers:

Lighting (UK): Neg Earth Lights

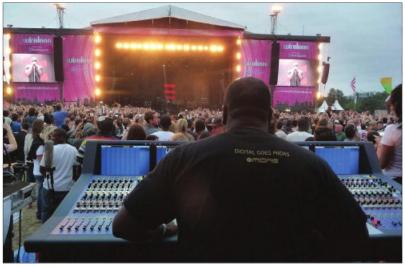
Lighting (Europe): Flashlight Rental BV

Sound (UK): Britannia Row Sound (Europe): Clair Brothers

Video: XL Video

Video Control: Control Freak Systems

Trucking: Transam Trucking



Kenyatta "Kelo" Saunders pictured at the Midas XL8 during Jay-Z's set at the 2010 Wireless Festival. "It's the only desk for me now . . . I want to get one of my own."

Lights

Patrick Dierson has been working for Jay-Z for three years now; this would not be so unusual but Dierson is one of those LDs who's reached the lofty plateau where he can design, programme and produce a show, then safely leave the tour in the hands of an operator. "This is the only artist I go on tour with, I retired from the road about 10 years ago. I came to the job as a bit of a fluke through Justin Collie, my associate at Artfag."

Artfag is a collective of designers, Collie and Doug 'Spike' Brant being currently engaged on Bon Jovi, Brant is lighting designer while his colleague Collie acts as creative director. 'Justin put me in to cover some shows which worked great; a fluke because I happen to know Jay-Z's body of work intimately - yes, I'm a fan. I still get people asking me is that run to time code? And I can say absolutely not, it's all done on the fly. It's a show built on audience response and interaction, so for example on one song, DOA, I use a MIDI drum head to trigger the show as it gives me the most sympathetic tool for how the music is progressing in that song. That's why good knowledge of the songs and their lyrics is indispensible. Maybe 50% of the show is in response to the audience, my head's on a swivel, and of course I have a lot of lights focussed out into the audience. Jay-Z has that incredible ability to have an audience up on their feet for 75 minutes without rest - I've yet to see anyone seated at his shows."

Schneider indicated you use different lighting suppliers - is that difficult to manage with a large show and such a strong busking element to it? "We had Flashlight for France and Germany, the UK is Neg Earth; it's all been in the groove but there's always an element of concession to the units you use. The grandMA is a big help - I have a very dialled-in show file, the clone function is

solid and consistent, way better than any comparable desk, and that gives me the consistency to run with the changes of suppliers and lamp types."

Do you have an idealised equipment list of Wash and Profile moving heads? "We change so often it's best not to think in those terms; with all the designs I've done for Jay-Z we know we're going to bounce around, and he also asks that we change things at short notice. Atomic Lighting, based in Lititz near Tait Towers in Pennsylvania, provide the system in the US. They've really won over the Jay-Z camp. Their gear is really well prepared and in great condition. We fly to Bonnaroo after we play Isle of Wight and Atomic has rebuilt our standard touring rig for that show on four days' notice. In principle, this show is based on a three-truss rig, upstage, downstage, and the mid truss I've actually split into separate truss sticks so I have six 10ft sections running up/down stage."

Dierson continues: "I need strong base looks from my Washlights and custom gobos. I also have a set of custom pentagonal shaped arrays off the upstage truss formed with LED fixtures, normally things like GLP Impressions or Elation's Design Wash LED Pros, though here we're using I-Pix BB7s." That's a very different light from the other two? "But it works here because their function is to fill the negative space above the cityscape skyline."

"Because this show is so video heavy I'm very conscious that we need a powerful Washlight, I tend to err on the side of fewer but bigger, Coemar Infinity XL has the output and that's what I get from Atomic and Neg Earth. For profiles I have Martin MAC III, a total of 36 Wash and 24 Profile, five pentagonal arrays, and I also have eight 300W Coemar ACL units on the floor which more than adequately

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replace the Syncrolites that we've traditionally used in the past. It's the lenticular lens that seems to make the difference; same thing with the Clay Paky Alpha Beam 300s."

Hand on heart, it's not possible to comment on Dierson's work - the opportunity to make an objective judgement did not arise, but the intention was clear and well reasoned. If you visit the fan sites there's a fair bit of comment about the lights, referencing the fact that they enhanced the pulse of the show and helped sustain the vibe. From down in the pit it looked very vibey to me.

Sound

Kenyatta 'Kelo' Saunders has mixed other artists, Raphael Saadiq and D'Angelo to name two, but has been with Jay-Z a long time, "since the Fade to Black tour, just before he retired - about five years on and off. I just came back on this tour in January."

As was said in the introduction, Britannia Row is providing the PA system for the UK leg of the tour, an L-Acoustics K1 system. Before going there I asked about the desk, for I had spotted an XL8 out front: was that also from Brit Row? "No, it's from Clair Brothers," said Saunders, "it's the only desk for me now, in fact I want to get one of my own." Though I didn't see any (this was a

particularly rushed and chaotic event), Saunders did say one or two people from Midas were there to see him that day, so maybe he was already in negotiation?

Saunders continues: "I'm really an analogue guy, I've been using the H3000 for most everything I do, but moving to this was very easy. Easy because it has the XL4 mic pre's, so it sounds amazing, just like me and everybody else is used to."

Typically, a Jay-Z show features several guest vocal artists, Beyoncé has been popping up on this one in Europe several times already, so between Jay's band, DJs, tracks and the inevitable revolving door of vocalists, was this a difficult show to manage and was that what prompted the switch to a more programmable desk? "I have almost 100 inputs, 96 to be exact: 50% of that is drums and percussion. We also have some Pro Tools and Ableton Live," he says. As mentioned, Ableton Live is a DJ-oriented producer software package - an instant replay tool, it takes a track and can then put it onto multiple outputs. And then there's the vocal: on any given day that can be as many as eight. Bleek sings with him regularly, and Bridget Kelly. Mr Hudson, a British artist Jay-Z thinks highly of, is one of our openers today and he will probably sing tonight."

Quite loose then. You have to respond quickly - does that affect your mic' selection? Saunders smiled broadly, something he does a lot: "Just good old Shure SM58s for most of them, though Beyoncé has her own gold-plated Sennheiser SKM 5200. It is very loud on stage," Saunders and monitor man Kenny Nash had a brief discussion between them: "Sometimes it's 110dB up there," Saunders said accusingly, to which Nash didn't so much agree as deflect: "We do work together so when he calls and asks me to turn it down I do try and help him."

The good feeling between these men was apparent: as we'll see later, the stage sound is enormous and frankly it's what the artist demands, so both men are fighting fire all the time; but they don't waste energy pulling each other to pieces about it.

"Luckily, everyone's mic technique is good," said Nash. "Jay-Z doesn't do that cupping thing; in fact he's very careful, you'll see when he holds it close he splits his fingers apart to get as much capture in there as possible."

"The only mic we're working on at the moment is for gongs," adds Saunders, picking up the question. "We've got two for the drummer and one in the perc's. We've





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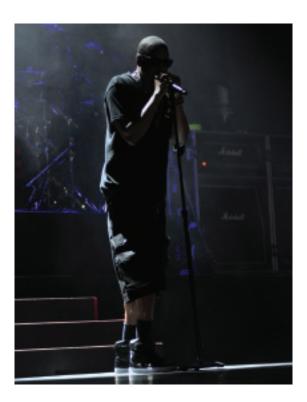
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tried [Shure] B52s but are currently experimenting with [Beyerdynamic] M88s and they seem to be working.

Oh - and an Audix D6 in the Kick with an SM91 is proving good. What's difficult about the mix is that Jay-Z likes to hear lots of low end on stage and from the house; he wants to hear it as he recorded it, so we incorporate a number of album tracks on Pro Tools."

Does the K1 give him and his artist the kind of bass response he's looking for? "It's good in here, everything is pretty tight, but I think it's better outside. Normally I'm using Clair's I5 system, but that's a different beast - the I5s have a different energy about them, that fat low end is a sound the US audience has grown accustomed to."

You'll be at the Isle of Wight tomorrow and have a different system again (probably Meyer from SSE/Canegreen?); although that's a festival, is this concept of picking up local systems depending on which part of a touring territory you're in proving manageable? "It's a challenge. We started with a d&b J Series and that system is amazing . . . now normally Clairs. We're experimenting, trying to figure out what is best. As I switch from system to system I set myself two targets, to get the Jay sound and get the best out of the boxes - not one exclusive of the other. That works well for me."

Monitors

With high sound energy levels on stage already admitted, I asked Kenny Nash if there was any chance this could change to in-ears? "Actually, I just got Jay on the Sennheiser G2 system, most of the band were already there; they have Sensaphonics ear-pieces, Jay has Ultimate ears: I'm not sure that's the right one for him yet. Thing is, I have to put a full show mix in the side-fills for him, that's four Clair R4s a side with two R4 Subs beneath - I also have subs for the drums and percussion, and there are eight wedges across the front of stage below a grille panel just for Jay."

So the emphasis is on following him with his mix as he moves around stage? "I've set up snapshots for every song," Nash mixes from a DiGiCo SD7, not a Midas. "It was hard for me to find a console with 33 auxes. I'm using 24 mixes stereo and mono - that kind of limited my choices, and yes, it does mean we've got two mix engines at the side of stage, and currently



I can't take any of Kelo's mixes, but I believe they're working on that. The trick for me is to listen to the talk-back mic from Omar Edwards, Jay's MD. I can't actually see more than half the stage, so I listen to him from start to finish. This is a high-energy show, it's a party up there, musically and visually you have to feel the energy coming off the stage. Hey, after the show we even get grandmothers coming up and saying; I never thought I'd enjoy that so much, but I did."

Acknowledging the imperative for such high levels on stage, something that as Nash said, "makes for a lot of colouration coming off stage", I asked both men if there was some, as yet undiscovered technology that might help in this situation. "In terms of technology I think we already have most of the newest stuff available to us," said Saunders. "The thing to consider is this; not every band sounds good on every console. Here, we're working a lot of the time on the fly, which is kinda good, but pressured. When Eighth Day Sound provided the J Series I had a Digidesign Profile, a good console but limited for moving bandwidth around; I was pushing the DSP too hard. The XL8 can handle that, which allows me to be more creative, though I believe the main reason the Midas can do that is because the Mic Pre is so good I'm not using a lot of DSP power on channel EQ to start with. So to answer your question - technology we got, but crew is important too, that's why today has been smooth. Those Brit Row guys just came in and did it, no drama."

Just doing it was the overwhelming sense of the show. Whatever the pressures upon Production and the need to be constantly monitoring the tomorrows of sifting what gear goes where and when, everyone who operates and makes the shows happen was calm, in charge and on top of their game. No drama.





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