

Around the same time that George Michael and Andrew Ridgeley were starting their recording career as Wham! back in 1981, the concert lighting industry was about to take a massive technological leap with the birth of automated lighting. I distinctly remember the live concert video for "Everything She Wants" a few years later (just as I was starting to become interested in the lighting field myself) featuring a fairly large rig of both conventional fixtures with a few moving lights interspersed throughout (unfortunately, the video was shot in black and white).

To say that both George Michael's career and the concert lighting industry have gone through some radical changes since the early '80s would be a huge understatement. Now, with his first tour in 15 years (17 years in North America), it would seem that Michael is making up for lost time with one of the most contemporary-looking and state-of-the-art video and lighting rigs to grace an arena this year. Although this particular tour is only hitting Canada and the US now, this show has actually been on the road (off and on) for nearly two years with some major and minor tweaks along the way.

Although he hasn't hit the road in quite some time, Michael has managed to keep his fans' interest by releasing a CD every three to six years, including

an album of covers and standards entitled *Songs From The Last Century*. His latest album, *TwentyFive*, contains his greatest solo and Wham! hits along with a few new songs including a duet with Paul McCartney. Needless to say, the fans have shown their support by making the *25 Live Tour* one of the hottest tickets around.

The original stage concept, designed by Willie Williams, has proven remarkably adaptable to various size venues. When the tour started in Spain in the fall of 2006, it was playing in arenas, then, last summer, the show was upsized and toured European stadiums, and now as it travels through North America it's gone back to the arena-size production while retaining some elements which were added to the stadium run.

Benoit "Ben" Richard joined the team as Lighting Director and Designer when the original LD, Vince Foster, had to leave for another tour. Without downplaying his role on this tour, Richard is quick to point out that video is the dominant visual presence on this production, with lighting taking a largely supporting role. Indeed, it is hard to ignore the video element which consists of three massive, curved screens. Barco's MiStrip, which was developed in part for

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RIGHT: LD BENOIT RICHARD AT FOH WITH THE WHOLEHOG 3.

this tour, uses long, thin modules of 3-in-1 RGB LEDs which can be mounted to frames of various shapes and sizes, thus allowing the designer to create relatively high-definition images on curved surfaces.

Williams' design features a towering central screen that gently sweeps into the floor and then flows off the edge of the stage, resembling either an unraveling scroll or a waterfall — depending on your point of view. The two outer screens wrap around to the sides of the stage reflecting the curves of the centre screen and allowing the fans seated off to the sides to catch a glimpse of the eye-popping visuals, which they might miss on an old-fashioned flat screen.

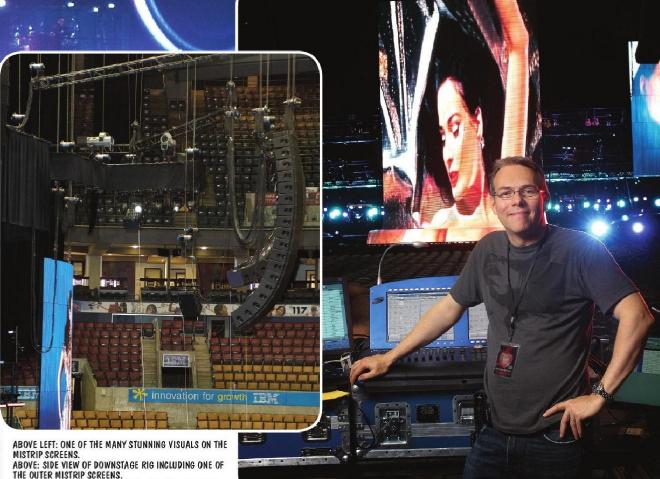
The content that fills these screens was custom-designed by Williams and his team while Head of Video Richie Shipman took charge of arranging and programming the video triggers using the Timeline feature of the Hippotizer. Michael takes the opportunity to banter with his fans quite frequently, so each song is a separate timecode event.

The visuals themselves are a mix of abstract patterns, old footage of Michael (including some brief clips of his days with Wham!), and one particularly steamy clip of burlesque artist (and former Mrs. Marilyn Manson) Dita Von Teese, which accompanied Michael's cover of "Feeling Good" (for some unknown reason this clip was the choice for ringing out the video system earlier in the day, not that anyone was complaining).

IMAG was used rather sparingly for an artist of this stature, which may have annoyed some of the fans out in the nosebleed seats but reinforced the notion of video as scenery rather than just video for the sake of video.

While many LDs might find the task of taking on someone else's design daunting, not to mention the fact that your department is relegated to the backseat while video rides shotgun, Richard relished the challenge and set about putting his own personal mark on the production. Fortunately, he came on board relatively early while the rig was parked for a few days in Rotterdam, so he was able to get some programming time during that period.

Originally from Montreal, Richard currently resides in West Hollywood during those rare stretches when he is not on the road. In addition to his own design work for artists like Rob Thomas and Dream Theater, Richard has consid-



GEORGE MICHAE

erable experience as a Lighting Director and automated lighting programmer, and has worked with designers as diverse as Marc Brickman (Matchbox 20) and John Broderick (Metallica and Yes).

While the rig didn't really change during the first leg, newer elements were added for the subsequent stadium run, many of which carried over for the current North American leg. The overall design concept for the stage remained the same, but the centre video screen got wider and taller. Richard added IPIX Satellite LEDs to the bandstand (referred to as the "jailhouse" by the crew) to give a base wash of colour to this area while MR 16 birdies are used very effectively as keylights for each of the band members.

While the main video screens run independently of the lighting rig, Richard has his own media server: a Catalyst Pro (V.4 running pixeIMAD) which he uses to feed content to the Pixeline LEDs that line the edges of the jailhouse. While the low-res look of the Pixelines stands in stark contrast to the crisp images of the MiStrips, the two complement each other nicely with the Pixelines providing a physical link from the centre screen to the outer ones.

One of the unique aspects of the lighting rig is what isn't there, namely, a front truss. In fact, the design has evolved in such a way that you don't really see much truss at all, especially for a rig of this size. "The rig was originally designed with a front truss which we have now split into two parallel trusses out over the audience - this provides an unobstructed view of the centre video screen," explains Richard. "As the tour progressed, George expressed his desire to hide as much extraneous gear as possible to really make the video element stand out, so we also added theatrical-style teasers to hide most of the overhead trusses."



ABOVE: SYNCROLITE'S NEW SXB-5/3S ON THE FLOOR UPSTAGE AND ON THE MOVING

A total of four Front of House followspots (just for Michael) and four side truss spots (two for Michael and two for the backup singers) are employed to make sure visibility is adequate. Richard starts the spot levels low and gradually increases the intensity during the show so as to not blind the artist or overpower the visuals

Since the video element extends right onto the floor of the stage, Richard was careful to not use much overhead light at all except for certain songs. "The overhead fixtures are built into most of the cues, but I ride the intensity low on an inhibitive submaster to ensure they don't interfere with the visuals," says Richard. "Luckily, I have more than enough fixtures on the floor to provide some serious aerial effects.



ABOVE: VIEW FROM THE DECK SHOWING THE ONSTAGE TRUSSES MASKED BEHIND THEATRICAL TEASERS (BORDERS).



ABOVE: SIDE STAGE TRUSS AND FOLLOWSPOT POSITION.

PERSONNEL	TYPICAL LOAD-IN SCHEDULE		
Lighting Design and Direction: Benoit Richard	8a m	Rigging Call	
Visual Concept and Design: Willie Williams	9am	Stage & Lighting Load-in	
Original Lighting and Set Design: Vince Foster	10am	Sound Load-in	
Crew Chief: Kevin Tyler	4:30 pm	Line-check	
FOH / Jail house: Blake Rogers	5:30pm	Sound check with GM	
Dimmers: Jerry Smith/Rhane Rhodes	: 7pm	Doors	
Syncrolite Tech: Jeremy Knight	8:30 pm	Show	
Lighting Tech: Moss Everhard	11:30 pm	Load-out (average of 3 hrs.)	
Head of Video: Richie Shipman			
Lighting Vendor: Ed & Ted's Excellent Lighting, Oxnard, CA			

LIGHTING EQUIPMENT LIST

110	Marrian	Trusses:
US	PHOVING	Trusses.

- 8 Syncrolite SXB-5/3
- . 12 Martin MAC 2000 Wash
- 12 Martin Atomic 3000 with scrolle Grid Truss 1:
- 10 Martin MAC 2000 Profile
- · 12 Martin MAC 2000 Wash Grid Truce 2:
- . 4 Martin MAC 2000 Profile
- . 8 Martin MAC 2000 Wash
- . 8 Martin Atomic 3000 with scroller Side Trusses:
- . 6 Martin MAC 2000 Profile
- · 4 Martin MAC 2000 Wash · 4 Truss Followspots
- Jailhouse:
- 12 Martin MAC 2000 Wash
- 12 Martin Atomic 3000 with scroller
- · 26 MR 16 Birdies
- 16 JTE PixelLine 1044
- · 24 Color Kinetics Color Blast Floor:
- . 10 Mortin MAC 2000 Profile
- . 12 Martin MAC 2000 Wash • 6 Syncrolite SXB-5/3

- 2 HMI 4K with douser
- Audience Trusses: . 15 Martin MAC 2000 Profile
- 14 Martin MAC 2000 Wash
- 22 Robe LED 8-Lights
- 22 Mole 4-Lights

Totals:

- . 45 Martin MAC 2000 Profile
- . 74 Martin MAC 2000 Wash
- . 14 Syncrolite SXB-5/3
- . 32 Martin Atomic 3000 with scroller
- 22 Robe LED 8-Lights
- 22 Mole 4-Lights
- · 4 Truss Followspots . 26 MR 16 Birdies
- 16 JTE PixelLine 1044
- 24 Color Kinetics Color Blast
- 2 HMI 4K with douser

Control:

- 2 High End Systems Wholehog 3
- 10 High End Systems DP-2000 Media Server
- 1 Catalyst V4 with PixelMad Other
- . 2 7R33 Hazer with fan

Martin Mac 2000 Spots and Washes form the backbone of the lighting rig with Atomic 3000s (with Atomic Color scrollers) and Syncrolite's new SXB-5/3s providing additional punch when needed. While much of the flown rig is hidden, Richard does make effective use of two US trusses on variable speed motors which fly in and out during select numbers.

One of the additions to the stadium leg which Richard kept for this run is the Robe LED 8-Lights which are hung out over the audience. He explains: "On the first arena leg, we had 8-Lights with scrollers but found that the LEDs were better-suited to the adverse weather conditions we sometimes experienced outdoors."

For the current North American leg, some other gear substitutions came into play as a result of availability on this side of the world. "The Syncrolites were originally Zap Technology 4.5K Big Lites," comments Richard, "and the IPIX Satellites were swapped for Color Kinetics Color Blasts."

Richard controls the rig from a Wholehog 3 networked to three DP-2000s which output a total of eight universes of DMX. When asked why three DPs were used instead of two (each unit can output four ports of DMX), Richard explains that the high number of RGB fixtures was causing the DMX processors to bog down — a common occurrence with network-based consoles. By adding the third DP-2000, they were able to remove one universe from each of the first two, which

and right) he gets from the soundboard and the click track from backline into his intercom, further ensuring there is no delay between the music and the visuals.

As you might have guessed, Richard is an LD who takes doing his homework very seriously. To that end, he has been an avid proponent of visualization software for quite some time and currently uses an ESP Vision system to give him an edge when preparing for a tour of this size and complexity.

While he finds ESP Vision useful given the ever-shrinking schedules which seem to have become the norm these days, he is quick to point out that Michael and his management team are keenly aware of the importance of production time and ensured that the creative staff had ample time to create a show which is fast-paced, tight, and ultimately, entertaining. As Richard puts it so succinctly: "They do it right!" (Author's note: I think this might be the first time I've heard an LD actually say he or she had enough production time.)

Speaking of time ... we asked Richard why the show started nearly an hour late and he explained that Michael likes to start a bit later (usually 30 to 45 minutes) to make sure that no one misses the beginning of the show due to weather, traffic, etc.

Even with the generous schedule that preceded each leg of the tour, Richard spent considerable time with the Vision system prior to this run, including 10 days at Air Studios in London. He also spent four days at Michael's house in



eliminated the problem right away without having to change any patching on the stage end of the snake.

While Richard runs much of the show live, the Hog does receive SMPTE timecode from backline, which he uses to trigger many of the cuelists. For some of the faster numbers, Richard found it necessary to do some clever math to "pump the beat" as requested by Michael, and came up with a method of building "POP and FADE" intensity chases between two, three, and four groups of fixtures which would lock in with the tempo of the song. The challenge was to figure out the math based on the BPM (Beats Per Minute), but Michael's tempos are not whole numbers (ie. 106.342 BPM).

The formula Richard used was to take the BPM and divide it by 60 to get Beat Per Second (BPS) and then I take one second and divide it by the BPS to get the "Time Between Beats" (for example: 106.342 BPM would give you 0.564 seconds between beats). Using that formula, a "POP and FADE" chase with two groups of fixtures would look something like this:

Cue #1 =	GROUP 1 at	100%	Intensity/O sec.	XFade .	WAIT TIME:	0.100 sec
Cue #2 =	GROUP 1 at	0%	Intensity/0.45 sec.	XFade	WAIT TIME:	0.464 sec
Cue #3 =	GROUP 2 at	100%	Intensity/O sec.	XFade	WAIT TIME:	0.100 sec
Cue #4 =	GROUP 2 at	0%	Intensity/0.45 sec.	X Fade	WAIT TIME:	0.464 sec

Then Richard started playing with a concept he learned from keyboard sequencer programming called quantizing, which makes the loop less robotic but still keeps it locked in with the BPM. "I found that I could shave 1/8th or 1/4th of the wait times on Cue 4 and then add the same amount of time on Cue 2," he explains. "This made the first beat hit faster than the second beat but kept the loop locked in with the BPM. It's very exciting stuff when you can trigger all these loops via timecode."

One thing you don't often see next to the lighting console is a small audio console just for the LD - this allows Richard to mix the direct audio feed (left

ABOVE: FOH SIDE TRUSS LOADED WITH MOLES, ROBE LEDS, AND MAC 2000 PROFILES AND WASHES.

Dallas before the '07 stadium tour. "I had a complete system set up with a huge video screen in one of the spare rooms," he explains. "Much of the time I spent on my own, but George would often drop in to check out what I was doing and offer his suggestions."

Richard was given considerable creative freedom within the inherent constraints imposed by the stage and video design. Michael's main requests were to match the ever-changing colour palette of the video and content and, as mentioned earlier, to "pump the beat." As well, Michael gave him some tips on who to follow for specific songs (ie. the bass line or the keys, etc.).

The time in London was followed by another period of pre-viz work in California: eight nights in LA with the full rig and then two more nights in San Diego before the tour kicked off there. Once this leg wraps up, the show returns to London for what's being billed as the "Final Two" shows at Earl's Court, both of which will be filmed for a DVD release.

Richard is obviously enjoying his time on the road with George Michael, but is also looking forward to some time at home in LA. His performance behind the Hog is almost as energetic as Michael's is onstage, and when asked if he has any favourite tracks, he throws out nearly half the set list including "Fast Love," "I'm Your Man," and "Faith." While he does enjoy the lighting direction and operation aspect of concert touring, he also envisions himself doing more design and letting other LDs take his creations on the road. Being in LA, he also sees himself getting into the film and television lighting scene there.



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