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# Valley of the Dolls

The Pussycat Dolls' new tour provides show-business glamour on several levels

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**S**exy, streamlined, slick: That's the Pussycat Dolls show, which wowed Europe—the group's second headline tour of the territory—while promoting the new album, *Doll Domination*.

The entertaining, high-energy performance fuses effortless dance routines with a pumping mix of musical genres—pop, rock, hip-hop, cabaret—taking the girl-band phenomenon to new production heights. Attracting a wide-ranging, arguably 80% female, demographic, the PCD show embraces the concepts of independence, character, and sassiness—it's unashamedly good-looking and assertive.

A warm, friendly atmosphere was the first thing to hit me when walking into the *Manchester Evening News* Arena—despite the sub-zero temperatures outside—and this, along with a good sense of fun and

high production values, is an on-tour element that production/tour manager Bryan "Froggy" Cross is adamant about maintaining.

A total of 45 *Doll Domination* crew members took to the road in Europe, including 10 from the U.S. This report is based on the European tour; the Pussycat Dolls are currently in the U.S., opening for Britney Spears. After that, the group will return to this show for dates in Australia and Asia.

### Cued for surprise

Cross and the Pittsburgh-based lighting designer Scott Warner co-designed the set, which consists of double-decked walkways, with three sets of custom staircases made of small aluminum frames and polycarbonate makrolon tops for transparency, allowing a submerged bottom section of the center-stage LED screen to show through.

The structure was fabricated in the U.K. by Wakefield-based Litestructures; the tour also made use of Litestructures' production rehearsal facility. The company also built a 49.2' wide by 33' deep and 8' tall structure to fit onto touring house stages. Other stage features included five scissor lifts from Litestructures' rental stock, the tops of which were specially made to accommodate a set of motorbikes and dancing pole props.

Warner and Cross have worked together on numerous projects, and there's a great creative synergy between them. Both have worked at many different levels of the industry—as stagehands and designers and engineers—so they also know how to make their creations practical, workable, and tourable.

Warner has worked with PCD for two-and-a-half years. He has carte blanche as far as the lighting design

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is concerned, with a basic requirement being to produce a large, action-packed show that keeps plenty of visual surprises coming right until the final number.

The internally lit PCD aluminum globe—flown at center stage—following along with the “Doll Domination” theme—was one of Warner’s concepts, together with an idiosyncratic trussing design based on octopods; he also specified the use of spheres to bring structural integrity to the space and to avoid a feeling of uniformity and straightness.

All lighting, trussing, and rigging (for lighting and PA) equipment, along with a 13-way Kinesys automation system and Vector control, was supplied by the Blackburn, U.K.-based rental company HSL, working with the Pussycat Dolls for the first time. HSL also designed the eight-faceted Octopods, which were constructed by TFL. The project was managed for HSL by Mike Oates.

There are four 2.5m Octopods in total, two hung over the stage and moved on the Kinesys system, and two static units dead-hung below the front truss. The 4.5m circular truss resides upstage center; it also moves with a smaller semi-circular static truss positioned slightly downstage.

Upstage left and right are two heavily loaded 20' sections of Tomcat SwingWing trussing flown diagonally; the setup is completed with front and rear trusses. All of the over-stage elements are sub-hung from a T-shaped mother grid.

Warner is a big fan of Robe lighting products. He first used them at a Pussycat Dolls gig in St. Petersburg, Russia last year, and, ever since, they have been his moving lights of choice. “I was really impressed with the brightness and the features,” he explains. “There were other moving lights on that show, but the Robes absolutely ran away with the show—they were so intense.”

Always keen to embrace new technology, Warner wanted to try out Robe’s new Digital Series on this tour, so HSL purchased six Robe DigitalSpot 7000 digital moving lights, 36 REDWash 3•192 LED wash lights, and 12 REDBlinder 2•96s to add to the company’s already extensive Robe inventory. The DigitalSpot 7000 combines a digital projector and two RGBW LED modules. The REDWash—RED stands for “Robe emitted diodes”—provides a rectangular light field with manual control of beam spreads. REDBlinder is an LED version of the eight-lite Molefay.

“It was a logical move for us,” says Oates. “These new Digital Series products are going to get spec’d increasingly for tours and events, as their real potential is realized.”

Warner also used 60 Robe ColorSpot and ColorWash 2500E AT automated units on the rig. It was a relatively modest fixture count for an arena show, but the pod-based design really enhanced

the dynamics, and enabled the units to be spread out on many different planes, adding serious perspective and depth. Each over-stage Octopod was loaded with six Robe ColorSpot 2500E ATs, three Robe REDBlinder 2•96s, and three Martin Professional Atomic strobes.

The front truss features five Vari\*Lite VL3000 fixtures mounted on special brackets, with the pan and tilt functions disabled, allowing their use as followspots. Warner controls the intensity and other parameters from his grandMA full-size console—all the spot operators have to do is point. He wanted these units placed on the front truss to minimize spillage across the set and keep the beams neat and tight on the girls. An additional front-



The globe was built by ShowFX and is flown on the Kinesys system.



The central screen measures 21.5' wide by 12' deep, and, beneath the stairs, is a lower section that's 21' wide by 4' high.

of-house followspot is used to catch Nicole Scherzinger, the lead singer, if she sashays off limits during the lively performance. Below this are the two static Octopods, each with six Robe ColorWash 2500s, four Atomics and four 9-lites. Below these are the Robe DigitalSpot 7000 DTs.

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The semi-circle is rigged with three Robe ColorSpot 2500s, and the full circle has four more, plus eight REDWash 3•192s. A globe, embedded with a series of 30W bulbs on 13 dimmer channels, spelling out the words “Pussycat Dolls,” was built by Los Angeles-based ShowFX. The globe is also internally lit with two

Robe REDFlash strobes and flown on the Kinesys system.

The SwingWing trussing runs each contain eight REDWash 3•192s, four REDBlinder 2•96s, six ColorSpot 2500s, and eight Atomics. Upstage of the center-stage LED video screen is the rear lighting truss, with another 12

Robe ColorSpot 2500s, six strobes, and eight REDWashes.

The floor is relatively clear of lights, specifically to preserve the clean lines of the set and the open feel of the performance environment. Eight REDWashes take up the footlight position, spaced out across the front of the stage, and four ColorSpot

2500s serve as cross-washing shin-busters at stages left and right.

Warner uses the REDWashes to produce an extensive range of colors—from rich primaries to delicate pastels—washing the whole stage and set area. “They are fantastic,” he says; “they’re very bright, with an amazing color range.” He comments that the units also have a proper white—still a rarity for an LED fixture—and a feature that Robe has worked hard to produce after listening to user feedback.

Warner adds that he also loves the REDWash’s rectangular light source, especially when juxtaposed with the spherical sources on the rig; he notes that these units also look very good when combined with the REDBlinders.

The designer controls all lighting from the grandMA full size console, with another running in full tracking back up mode. The grandMA is his console of choice; when he started using it two years ago, he liked it so much that he bought one for himself—and it is carried on the tour. He finds it easy to use and great for on-the-fly operation. There are at least two songs in the set—“Halo” and “When I

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Grow Up”—that are improvised each night. HSL also supplied a grandMA light for use as a technical desk, located in the dimmer area.

One of the HSL crew's biggest challenges was the time frame—with a complex rig comprised of many component parts, all of which need precise rigging. Only a short way into the tour, they had honed the task down to just four-and-a-half hours. “We did a serious amount of pre-planning to maximize the efficiency and smooth running of get-ins and outs,” says Oates

One of several time-saving inventions was the construction of a dolly, specially tailored to fit in all dimmers and distro units. This is forked off the truck each day and positioned stage right, only requiring mains connection to get started.

In Europe, HSL supplied the crew to look after Warner and enjoy a bit of *Doll Domination*, chiefed by Eugene Benavidez, who is also the Kinesys operator. He was joined by Dan Tiley (dimmers), Kinesys tech Steve

Belfield, Jason Dixon, Rick “Avo” Butler, and tour rigger Chris Harris, who is also flying Britannia Row's PA as part of his HSL rigging duties.

### Video dolls

The show's live video is directed by George Elizando; gear was supplied by Nocturne Productions. Cross explains that the decision was taken to bring the video production from the U.S. because of Nocturne's proprietary V-Lite low-resolution lightweight screen, which has a silver finish in keeping with the metallic vibe of the set. The seven-week European touring period made it financially viable.

The central screen measures 21.5' wide by 12' deep, and, beneath the stairs, running concurrently, is a lower section that's 21' wide by 4' high. Two side IMAG screens are both fed with a single Sanyo projector; all screens are 16:9 aspect ratio.

The three operated cameras were also set to 16:9—all Ikegami 45s, also supplied by Nocturne. One is stationed at front-of-house with an 80

Canon lens, with two hand-helds in the pit, each fitted with 18 lenses. A fourth remote cam was secured on top of the riser on the left, beside one of the drummers.

Elizando cuts the mix using a Pinnacle PDS 9000i switcher. He likes GVs as a personal choice, but states matter-of-factly, “This is the kit that was supplied with the rig, and that's just fine—I make it work!”

Two Doremi hard drives store the colorful, lively playback footage, which was produced by the Los Angeles-based firm Stimulated and seamlessly woven into the set via time code generated from Cross' Pro Tools machine. Eighty percent of the songs feature playback footage primarily appearing on the onstage screens, with the IMAG generally concentrated on the sides, occasionally bumping over onto the LED at selected moments.

“It's a relatively straightforward show to mix,” says Elizando, whose main objective is to ensure that the girls can be clearly seen onscreen—



The show features more than 300 pyro effects across eight songs, and a ten-way, DMX-controlled gas flame system.



The crew honed down the load-in to only four-and-a-half hours.

no tricks, just in a straight, fast-cut, and bubbly IMAG format in keeping with the pace of the show. Scherzinger receives marginally more camera attention, with the rest of the onscreen action equally split among the others, which requires “some accurate time management,” he explains.

It’s his first time working with Scott Warner, but he mentions that they have struck up a good creative rapport, ensuring their two mediums work slickly in synch.

### Fireworks on stage

With over 300 pyro effects across eight songs, and a ten-way DMX-controlled gas flame system, well-executed pyro cues are another integral aspect of the show’s high-glamour visuals. Explosives and expertise were provided by Pyro Junkies, the U.K.-based indoor show fireworks specialist firm, looked after on the road by Steve Britton and Dan Mott.

The effects were all supplied by the company’s manufacturing arm, Wells. The gas flame system is the latest from the German manufacturer TBF, and is run from a Jands Vista lighting console. The power distribution to the system was specially designed by Pyro Junkies and is totally independent of the Vista, with isolation via a “dead man’s handle.”

Effects include a spectacular waterfall tumbling off the downstage edges of the two SwingWing trusses and a set of seven-second gerbs, which fired off the downstage rim of the stage, along with many other effects—an eclectic combination of

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mines, flashes, and jets. Pyro Junkies custom-designed trays to keep all the effects properly contained.

The cues are all very specific, so precise firing was required; they are achieved using a Heritage F60 desk, which is specially built for the pyro and effects industry.

### One-source sound

Cross, who mixes from side stage, is most definitely a man who believes in multiplexing.

Defying the stereotype that men can only concentrate on one thing at

a time—possibly strengthened by working with plenty of girl bands—he’s mixing both front of house and monitors, even while serving as production and tour manager; if that’s not challenging enough, he’s also the Pro Tools engineer. That’s in addition to co-designing the set with Warner.

Based in Wyoming, Cross has worked with the Pussycat Dolls for four years; he has a wicked sense of humor and a great knack for team building. “Naturally, it’s a challenge, but if you’re smart and organized on the advancing and pre-planning, and utilize the technology available, the multi-roles can be combined and you can work really efficiently,” he says, adding, with one of his mischievous grins, that this approach also minimizes any potential tour manager-production manager disparities.

The group sings live to 12 channels of Pro Tools tracks, accompanied by two sets of electronic drums; the

audio control is built around the DigiDesign platform, with a DigiDesign Profile console at the heart of the rig. This is owned, along with the Pro Tools suites, by Cross. He has the audio files supplied in original format, and, from there, programs and manipulates them to work in the appropriate rooms, simultaneously generating any necessary time code in Pro Tools. After that, it’s down to the girls to perform, which they do with great attitude and strong, confident stagecraft.



The show is designed to provide plenty of high-energy pop fun to the Pussycat Dolls' largely female demographic.

He uses a series of plug-ins, primarily Waves-based, with a Neumann KU 100 binaural head at FOH as his “ears” in that position. The KU 100 is a binaural stereo microphone resembling the human head, with two microphone capsules built into the ears. When listening through high-quality headphones, it gives the illusion of being right at the scene of the acoustic event. This can be referenced to his wedges, ears, near-field wedges, or the Waves analyzer.

In the quest to preserve those clean set and stage lines, Cross wanted the PA to be nearly imperceptible in a physical sense, so, for this reason and also for its sonic qualities, including excellent coverage and imaging, he specified an Outline Butterfly system.

The main hangs comprised 16 Butterflies a side, with three flown subs and 12 subs on the deck, plus side hangs of another 16 Butterflies, completed with a rear hang of eight L-Acoustics ARCs a side. For the venues needing delays, eight

Butterflies are used on each side. The system is powered by Outline amps—four racks per side—making a neat setup that is fine-tuned each day by sound supplier Britannia Row's front-of-house systems tech, Adam Smith.

For EQ, Cross used the Waves plug-in on the Profile, inserted left and right, along with Lake DLPs for system processing. “It’s a simple, clean digital system,” he comments. The only time the audio signal goes analog is when it comes out of the speakers.

Mics are a combination of Sennheiser and Neumann. The girls use Sennheiser 935 hand-helds, switching to headsets for a couple of songs. They run a Sennheiser G2 IEM system for the girls and the drummers—who internally mix themselves, each sending Cross a left and right mix, with two L-Acoustics ARCs and two 18" subs as side fills, injecting a bit of air movement for the dancers.

There’s a total of 26 channels running into one layer of the console, with 10 channels of FX returns.

The drummers are using Yamaha DT electronic drum kits, “absolutely the best-sounding electronic drums out there by far,” says Cross, who wanted something as natural and real-sounding as possible.

Cross’ world includes a large 218 bass unit right behind his console, along with two very funky leopard print-covered listening wedges at the sides, plus several other leopard print accessories—including a volume foot pedal. He admits to having a bit of a leopard print obsession—all in the name of “keeping it fun”—which is an essential that this whole tour seems to know how to do in great style; for example, all of the Pussycat Dolls’ flightcases are finished in pink, with leopard print interiors.

Obviously it’s a primary audiological objective to get the girls’ vocals loud and clear above the mix, but having perfected this to a fine art, it all appears to happen with a smile—as effortlessly as the rest of the production. 🎧