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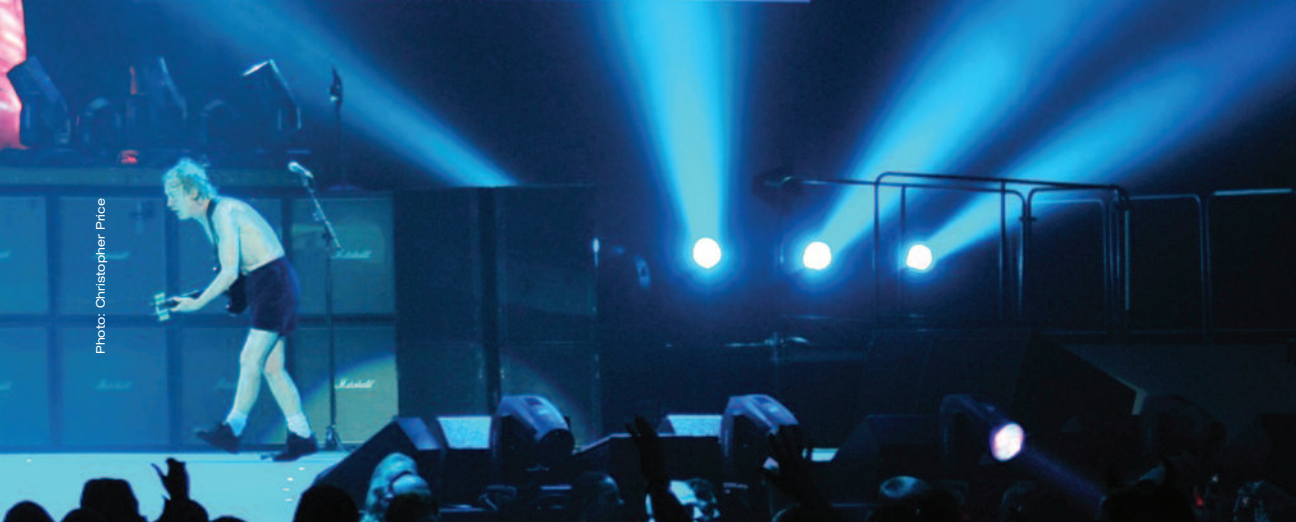




WITH
RIDING THE RAILS
AC/DC

AC/DC returns on the
Black Ice tour – with
a runaway train, a split
screen, and a
whole lotta Rosie

By: Sharon Stancavage



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As a band, AC/DC is the epitome of blue-collar rock—yet the group represents something more, as well. “On the one hand, they’re a very straightforward rock-’n’-roll band who have no pretensions at all; you can’t dress them up or anything,” says Patrick Woodroffe, designer of the group’s current *Black Ice* world tour. “But, on the other hand, they also clearly have some theatre about them—the lead guitarist dresses up as a schoolboy, they’ve got bells, and wrecking balls, and mad videos that they make—so you just have to get that balance right.”

Working with Woodroffe to create that balance for AC/DC is the scenic designer Mark Fisher, of Stufish. “Our view has always been that, in the three or four shows Mark Fisher and I have done together [with AC/DC], providing you give them a really interesting

playground, and providing you give them a clear image that is theirs, then you just let them get on with the playing,” says Woodroffe. “You don’t try to integrate the theatrics too much with their performance, because that’s not what they are about.”

The title of the band’s current album and tour is *Black Ice*, but, in the early stages of production, it was *Runaway Train*. “As soon as we heard [the new single] ‘Runaway Train,’ we said, ‘Oh, well, that’s easy—we’ll just have a runaway train at the back of the stage and start the show,’” Woodroffe remarks.

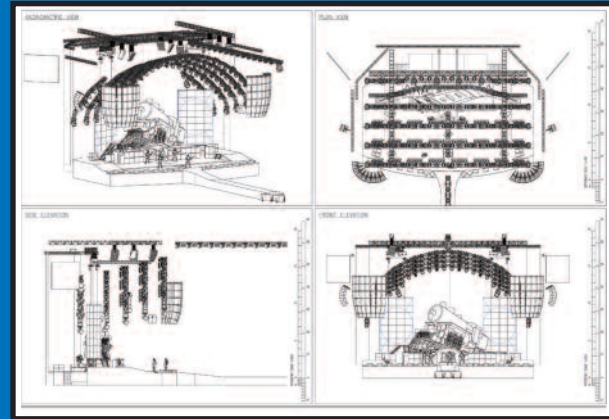
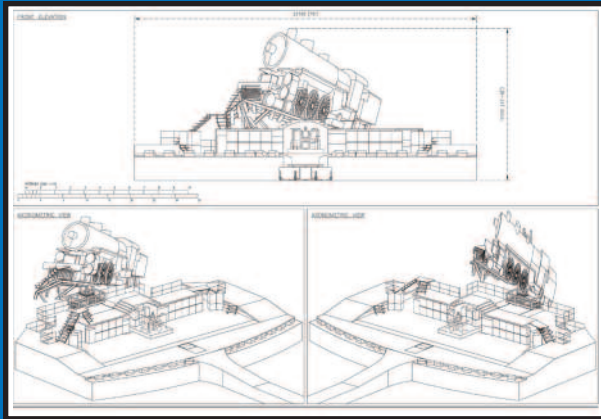
Indeed, “Runaway Train” is evocative of, well a...runaway train, but that’s a little more difficult to achieve rather than a simple stationary set piece. So Fisher got to work. “It was very clear to Mark that it would be a giant, great period steam train that

would basically crash through the video screen at the beginning of the show,” Woodroffe explains. Fisher developed the idea from a conceptual standpoint, and then handed the nuts and bolts of the train’s creation to the technical designer, Jeremy Lloyd. “We started off by creating a 3-D computer model, and then we distorted it to give it perspective—to make it look bigger, and more dramatic—on the stage,” Lloyd says.

This was just the first step of the process. “We took the 3-D computer model and printed out quite a few different views to quite a big scale, and then we had a scenic artist named Jackie Pyle create the steam locomotive, on a one-to-ten scale, out of clay,” says Lloyd. After the model was completed with the correct detailing, a 3-D laser scanner was used to put the train into



The train comes with lighting, pyro, smoke, headlights, a brass bell, and devil horns.



Drawings on top show the train (left) and the curved truss (right). Above: The rig was hung at Upstaging, Inc. during the programming phase.

AutoCAD. “From there, we got big blocks of foam cut, using a CNC machine; they went to the fiberglass company, who laid up the mold into CNC foam blocks.” After that, Ron Edkins and his team at the firm 2D3D created the strong, lightweight panels from thin-sectioned fiberglass.

The team worked out a metal structure for the frame, and then sent it, and the fiberglass panels, to Brilliant Stages. The team there “worked out how to deal with the frame, how to make the frame fit, and break it down into tourable-sized pieces from that same model,” Lloyd says.

Here’s how it all works: The sub-structure of the train is based around a 3,3307lb-high steel-base turret, 9.5’ x 4.9’ x 5.9’ in size, with two cantilever arms supported by a reinforced section of the main performer stage.

The stage was designed as a rolling support to be integrated with the main stage, enabling the locomotive to be built remotely from the main stage and then rolled into place.

To assemble it, the panel support structure consists of a four-tiered truss arrangement to facilitate building the locomotive from the venue floor. These are raised by hoists as each layer of panels is added, finishing off with an aluminum cow-catcher and distressed, “broken” aluminum rails and fiberglass sleepers cantilevered under the train assembly.

The 7,716-lb locomotive, still on hoists, is tilted to its 23° show position and attached to the central turret, after which the hoists are detached, leaving the unit freestanding. Surprisingly, the locomotive can be pushed up and downstage by only two stagehands; it

also requires only three crew members to rotate it into show position.

No matter how good the train looks in the real world, the correct arena scale is essential. “We have to make sure that the train fits on the stage with the rest of the staging, the lighting, and the video screens,” says Lloyd, “but, having it accurately created by a computer model, we can then fit it in with all of the other elements and we know it fits. If they did it by hand, then you wouldn’t be 100% sure that it would actually fit in the real world.” Indeed, size does matter, especially when one is talking about a 20’ high by 25’ long by 8’ wide train that weighs over 13,000lbs, and which incorporates lighting, pyro, smoke, CO₂, headlights, a brass bell, and light-up devil horns.

Train of thought

At the opening of the show, the Daktronics PST-10 LED display system, provided by Screenworks of Corona, California, is in full 24’-high-by-34’-wide single-screen form, and is used for a slightly bawdy animated short starring Angus Young, the lead guitarist, and two young ladies on a train. “The big opening cartoon was done by Sam Pattinson and his company One Dot Zero,” says Woodroffe. “He’s done stuff with U2 and he did stuff for us with the [Rolling] Stones last time around. He’s really good; he has a lot of interesting young filmmakers whom

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he chooses carefully for every project.”

The film cues the stunning opening effect, Woodroffe notes: “After being seduced by the girls, Angus then tries to save the train, but doesn’t quite make it—it’s too late and the train smashes into the video screen.”

Of course, the train doesn’t really crash; instead, the video screen tracks apart amid pyro (courtesy of Stage Effects and Engineering of Albuquerque, New Mexico) and transforms into two right-and-left screens. “Having a screen that started in the middle, then split apart, gave us the big gag of the train coming through, which is very exciting,” says Woodroffe. It also gave him a slightly different look to the stage—“two individual screens, both in portrait shape, which means that you can have the singer and guitarist, or the guitarist and the rhythm guitarist, and all those different permutations,” he notes.

(The PST-10 panel is the newest addition to Daktronics’ PST series. The panels feature the company’s MAG-10 technology, a new version of indoor/outdoor display module that uses three-in-one black stamped LEDs; this approach allows the screens to keep a low profile on stage until they’re used. The panels were also chosen because they’re relatively easy to assemble and tear down.)

In addition to this opening effect, the train plays a part in the entrance of one of AC/DC’s most famous characters, the well-endowed, inflatable Rosie, immortalized in the song “Whole Lotta Rosie.” “We did a new Rosie this time, but there are certain things with AC/DC that the fans and the band expect,” says Lloyd. “You don’t really mess with the format.” So, although the new Rosie, created by Rob Harries of Air Artists, is, in Lloyd’s words, “bigger and more outrageous,” she’s still recognizable to those who love her.

Normally, Rosie is inflated during the song named after her. This time, however, “Rosie appears sitting on the top of the train, and she’s nearly 60’ tall from the floor,” says Woodroffe. She actually comes out of the roof of the train, and taps her foot in time to the song. “The roof is on big drawer runners, so it slides backwards, and that’s how we open the top of the cap,” says Lloyd. “Inside is a box—it’s the box Rosie travels in when she’s deflated—and a fan is built into it.” From there, it sounds deceptively easy: Turn on the fan, and watch Rosie inflate. And that is the case—now; however, the logistics were more challenging in the beginning. “Rosie gets folded up with her legs folded in on top of her, so her legs pop out first over the sides of the train, and she inflates up the middle. I think the stage crew spent a long time inflating and deflating, just trying to find the best way of dealing with her,” Lloyd confides.



Video gear includes Doremi dual hard drives, two Barco DLP 20K projectors, and a Ross Synergy switcher, all supplied by Screenworks.

Photos: Christopher Price



The number "Hells Bells" gets the full treatment.

White light, green light

In keeping with the railroad theme, the lighting trusses are also fashioned to resemble a Victorian train station. "In a regular train shed, they use straight trusses that create a curve," Lloyd says. However, curved trusses take up more space in the truck and they're difficult to deal with," he adds.

There are five arched fold-away HUD trusses created by Tyler Truss for Upstaging, the tour's lighting gear supplier, that are positioned from stage left to right. "The trusses utilize custom joining pieces that lock off, so they can change the angles of the curve, as they need to, for a low trim, and, for a higher trim, they can extend it," Woodroffe says. These pieces, created and fabricated by Upstaging,

work with a floating pin that allows the trusses to freely articulate.

For the lighting rig, Woodroffe and Dave Hill, the co-lighting designer and programmer, make use of a wide variety of units, including Vari*Lite VL3000 spots and Coemar Infinity XL wash lights. "The Coemar Infinity is obviously a very punchy light," says Hill. "That was one of our main things—to get a light that had enough punch and energy, without making it an overly flashy show, as such."

Hill also introduced Woodroffe to the Clay Paky Alpha Beam 300. "I said, very early on, that I wanted a whole load of them, but we had never seen them in an arena, so, initially, we just put them on the floor," says Hill. "During the rehearsal period, I

emptied an entire truss of [other units] and replaced them with Alpha Beams—they ended up being one of the biggest fixtures in the show." The combination of the units' small profile and bright color mixing was a hit. "They're perfect for AC/DC," adds Hill.

Woodroffe was sold on the Alpha Beams as well, and not just for the obvious reasons. "Everyone is making bigger and bigger lights; they're all terrific, you can't fault them, they're fantastic," he says. "They're bright, they have wonderful effects, thousands of colors and gobos, and aperture sizes—but small is beautiful as well, particularly if they're less expensive than other lights. To be able to have 50 of something and not have it cost a fortune is really exciting. Especially if they don't use too much power, and they're small, and they can be lifted by one person, that's all for the good, I would say."

The full lighting lineup includes 120 Coemar Infinity Wash XLs, 36 Vari*Lite VL3000 Spots, 26 Clay Paky Alpha Beam Wash 300s, 24 Elation Impression units, 63 Martin Stagebars, 45 Philips Color Kinetics iW Blast 12s, seven Solaris T Flash 85,000W strobes from TMB, 22 TMB PAR 64s, ten Martin Atomic strobes, nine 12-light PAR 56 Moles, 12 four-light Moles, four Lycian 1271 truss spots, 11 Zap Technology BigLite 4.5s, and 12 Little BigLite 3.0s, all controlled by a pair of grandMA lighting consoles from MA Lighting and distributed in the U.S. by A.C.T Lighting. Also used are 82 Columbus-McKinnon motors, additional truss from Tomcat, eight Reel-EFX DF-50 hazers, ETC dimmer racks, and a Clear-Com communications system.

Once the trussing and instrument choices were made, Woodroffe and Hill started working on the set list. "We often sit down together, work out a color theme for a song before we start programming, and where we might have an effect like the pyro, or

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certain other elements to the show,” says Hill. The pair places the various visual elements within the production, and then looks at color. “We get a theme of color that goes through the song, but has lifts and drops, the same as any show does,” he adds.

AC/DC is a colorful band, and, with more than one song that has the word “hell” in the title, one might expect red to be a natural part of the lighting color palette—an expectation that is thoroughly met. There a few color surprises as well, however. “There’s a fair bit of green in the show,” says Hill. “I particularly like green—but it’s not everyone’s choice, particularly with artists sometimes.” Nevertheless, it is prominently on display here during “Dirty Deeds Done Dirt Cheap” and also in “You Shook Me All Night Long.”

Another of Woodroffe and Hill’s novelties is their extensive use of white. “We used many of versions of it—cold, warm, and everything in between,” says Woodroffe. “There’s sort of an integrity about white light. The older I get, the more I like to use it.”

The designers’ fixture choices also lend themselves well to working in shades of white. “The Alpha Beams are a slightly different temperature than the Coemars, and the Vari-Lites have a different temperature as well—it allows you to really build songs in white,” explains Hill.

One example of this is “Black Ice.” “I lit it in an unusual way, with a very cold blue-white,” says Hill. “There’s a section in the middle of the song, a guitar solo, where the entire system on stage changes to the warm 3,400K color temperature white; it’s a really dramatic change in how the stage looks and feels.”

Prepping the tour

Before the tour began, Upstaging went to the trouble of hanging the entire rig, including 71 motors, in the company’s suburban Chicago facility; this allowed Ron Schilling, the crew chief, to ensure that all the custom fabricated truss pieces fit together and that all lighting units were performing to spec. “Sometimes, the best-laid plans for a tour cannot foresee difficulties until the rig is

actually set up and tweaked,” says Schiller. “With the amazing facility they have [at Upstaging], we were able to make sure that the first load-in would go as fast as all the others on the road.” Hill made use of the company’s in-house ESP previsualization suite to focus the lights, while the touring crew of eight electricians erected the rig. Within two days, Hill was up and running on the real rig. “There’s no place I’d rather be to program something of this size,” he says. “I don’t have to battle house lights or other people’s work time to get my cues done.”

In the end, the best thing about an AC/DC show is...AC/DC. “Everyone we talk to loves working with AC/DC,” says Lloyd. “They are such fun guys to work with, and it’s a fun show to put together. Which is kind of why we do this for a living, really.”

AC/DC concluded the American leg of its tour last month, and continues touring in Europe until the end of June. A time-lapse look at the AC/DC load-in can also be found at www.upstaging.com



The band performs “For Those About to Rock (We Salute You).”