

## Creating a dramatic fusion of scenery, video, and lighting for Rascal Flatts' tour

By: Paul Berliner Photography: Adrienne Orilla

Looking back at the opening concert of Rascal Flatts' *Still Feels Good* tour at Connecticut's Mohegan Sun Arena—a fascinating day comprised of interviews, rehearsals, and culminating with the band's concert—a certain memory is unmistakably clear. When I worked on video crews for Bay Area sporting events, the chatter on the headsets would often evolve into a verbal game of “Can you top this?” The audio mixer would tell a tall tale about a client or a particularly challenging remote, then the centerfield cameraman would chime in with an even wilder anecdote—but invariably, the technical director would top everyone with one of his many farfetched yarns.

Having experienced Rascal Flatts' *Me and My Gang Tour* a year earlier, I knew then that nothing could ever top that remarkable set, comprised of a giant video structure code-named “the mother ship” by the crew. Combining brilliant design and video content, the mother ship constituted a groundbreaking immersive concert experience that could not be surpassed. No way, never, case dismissed.

Yet, over a year later, here was another set taking shape that had the potential to prove me wrong. How could the *Me and My Gang* concert experience ever be topped? I was about to find out.

### The 3-D video set

Because it was so visually overwhelming, with over 140 points of rigging, simply describing the Rascal Flatts set is no small task. Consider a main stage comprised of 154 Plexiglas “decks,” each of which included 18 Barco MiTRIX LED tiles. This provided a solid, expansive foundation for video imagery on which the band members could perform, plus an E-shaped “dog pound” area for up-close audience contact. Next, four huge cylinders lined the rear of the stage, all custom-fabricated by All Access Staging, and each clad with MiTRIX tiles. Each cylinder was large enough to hide a band member within, and each had the ability to rise and rotate.

Above the stage, in a dramatic thunderbird motif, 96 Barco OLite 510 tiles provided the palette for the concert's main video content. Below the primary thunderbird, secondary thunderbird “wings” thrust out to the sides, up into the risers. With ease, these walkways allowed the members of the band—Gary

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LeVox, Joe Don Rooney, and Jay DeMarcus—to perform virtually within the audience. To enable the crowd (both in front and in back of the stage) to enjoy the full video effect, the wings were also dressed with MiTRIX modules on both sides, and the walkways were lined with hundreds of Acclaim Lighting's new X-Chip LEDs.

Immediately behind the front of house, a satellite stage provided the setting for an intimate mid-concert set. The floor (covered with MiTRIX modules) rose up for the dramatic opening number, "Me and My Gang." To enable the band to walk above

and directly into the realm of a 3-D experience. There were key moments during the concert when I wasn't just watching a musical performance with a video backdrop—I felt was in the video.

### Form follows function

The man behind the *Still Feels Good* set is Bruce Rodgers, president of Tribe Inc., and winner of the 2006 Parnelli Award for Set Designer of the Year, for his work on the *Me and My Gang* tour. At his offices in Venice, California, Rodgers' "tribe" consists of three designers: Sean Dougall, Mai Sakai, and Matt Steinbrenner. As Rodgers

appealing as last year's set, where we definitely raised the bar."

"After the Parnelli Awards show," said Rodgers, "I sat with the band, with Trey and Doug, and we talked about what we were going to do next. I'd been sketching ideas, and also thinking what can we do that's awesome, that can blow this set away? So we did a design that worked for 360."

"With these ideas in mind, I tried to solve all of Rascal Flatts' needs," noted Rodgers. "That is, we wanted 360°, we wanted audience interaction, and we wanted to make sure that the people in back and to



Above, left and right: The band in rehearsal. Center: A computer sketch showing the full layout.

the audience between the stage and the satellite set, a bridge (lined with X-Chips) dropped from the rafters.

Not quite enough? Three huge LED "dice" were suspended above the audience, each approximately 8' square per side, and each comprised of four Panasonic LED panels. The dice, symmetrically spaced above the crowd, effectively extended the video experience into the middle of the audience, with each side independently controllable from the video area backstage.

All told, over 4,400 MiTRIX modules were used—perhaps the largest number employed to date for a concert. With "surround" structures in place for video, the set went far beyond an immersive experience,

proudly notes, "They all have masters' degrees, they're all younger than me, and they're all smarter than me."

I spoke at length with both Rodgers and Doug Nichols, who, in conjunction with his partner, Trey Turner, form Rascal Flatts' management team, Turner, Nichols & Associates. Our discussion focused on the evolution of the set, from both a functional and a creative standpoint.

"Last year's set was a 180° setup," said Nichols, "and, in talking with Bruce, we discussed how we could come up with an idea that could be set up at 180, or 240, or even 360°, without being placed in the middle of an arena. That posed some difficulties, especially trying to configure something as massive and

the sides had the same great show as the people out front. Last year, we had a vertical design, kind of a spacecraft, whereas this year I knew that we needed to be super-horizontal, with super-clean sight lines. And out of this came the thunderbird vibe and the wings."

"When I made that decision," emphasized Rodgers, "it was form following function, because the thunderbird does two things: It gets us a great shape, an iconic shape that burns into people's minds, but it also opens up sight lines, allowing people to see clear across."

With set design and fabrication underway, an advanced video delivery system was next required in order to fulfill Rodgers' vision. That's

when Steve Daniels, owner of Nashville's I-MAG Video, called a "meeting of the minds" at NAB. Present were Steve Scorse (Barco's VP of sales and marketing for the media and entertainment division), Tony Van Moorleghem (product manager for Barco's new DX-700 LED digitizer), and veteran visual designer Charlie Terrell, the man responsible for video content for the *Me and My Gang Tour*.

As the driving force behind I-MAG's long-standing video expertise, Daniels needed to design a playback and delivery system that could pipe the highest-resolution video throughout the set. "Because the set is so big, it posed challenges in terms of aspect ratios and playout," explained Daniels. "Our goal was to facilitate this electronically, as simply as possible, and at the highest resolution. I got the hardware and the software people talking, and we ended up with the best solution. By using the DX-700, the first application of the product worldwide, we reduced the number of digitizers, and processed the video at a much higher bit rate."

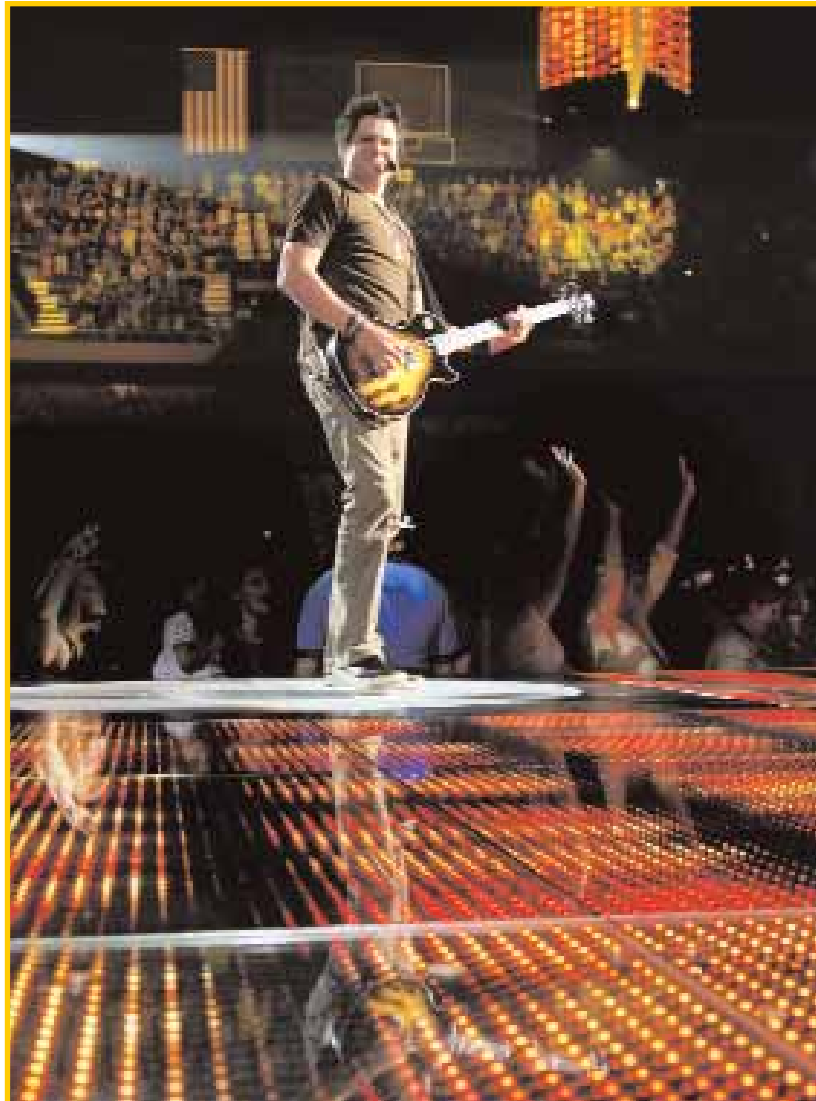
"We were excited to use the DX-700 on such a complex project," said Scorse, "especially with Daniels' and Rodgers' grand vision. This is a country tour where the video elements rival, if not surpass, those of the largest rock tours, and it takes country music to a new scale."

"With the gurus all together," continued Daniels, "we also explained to Charlie the scope of the set and the hardware's capabilities, in order to devise a completely unique video playout system."

And that's when the "single palette" concept was created, as Terrell was about to explain.

### **Dimensional editing—the single-palette concept**

When I first learned about Rodgers' design and Charlie Terrell's content



The Plexiglas decks feature Barco MiTRIX LED tiles.

creation task, I immediately thought that a multi-machine "sync roll" would be required to feed video to all the destinations in the arena. Here, Terrell's thinking was way out of the box. Given the success of the content created for *Me and My Gang*, the pressure was on, but the sole proprietor of Los Angeles-based Daddy Van Productions was up to the task.

"I wanted to avoid a sync roll," explained Terrell, "because number one, they never quite sync, and number two, it makes me nervous. I thought, if I built all of it into one Final Cut Pro palette, with a giant mask, I

could edit 12 to 16 different layers of HD content—all doing different things. Figuring out how to make the mask, using one 1920 x 1080 canvas to mask the regions—that was the most difficult part."

Let's call it "dimensional editing." When I edit a video, I'm always working with one screen in one dimension. But for this project, with multiple destinations throughout the arena, a different approach was required. By creating a mask, and by using Final Cut Pro's layering capabilities, Terrell assigned destinations to layers—and created one output file per song that

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encompassed all regions. Once the file was transferred to the servers, the show's video system did the rest— parsing one file into multiple LED walls. Not only did this technique avoid sync rolls, but it also allowed Terrell to create each destination's content with full visual knowledge of

then I got a handle on it, and then it got really exciting and addictive. You can do things that you could never normally do in one dimension. And now that I've done it, I want to do more of it. The possibilities are amazing, but it does take a shift in your mind."

it to me and says, 'Make me pretty pictures,'" added Terrell. "That's Bruce's genius. He gives me the dimensions of the canvas, and my job is to make it come alive."

Terrell's unique approach, combining movement and impressionistic imagery with sweeping



The thunderbird set piece hovers over the band.

what all other destinations were doing at any given moment.

"By building this as one piece, I can create it, and I can visually move around the room and deconstruct it in my mind," added Terrell. "As opposed to building one layer and then other separate layers, you're not able to see it move in the arena. That's why I built it as one piece."

I asked Terrell if he had to shift himself mentally to a different, more abstract, level in order to edit in multiple dimensions. "Yes," he said. "At first, I was scared to death, and

"I was really proud of that last show," said Terrell, "but there are two key differences here. First, I incorporated a lot more motion graphics, using Apple Motion; the other thing is that it's a 360 experience—with depth. Whereas last time, we had the mother ship, this time I have 16 streams that I'm working with simultaneously. Video is playing all over the theatre as you watch, all timed to the music, and putting you within a 3-D experience.

"The way that Bruce and I work, is that Bruce designs, and then he gives

color washes, clearly "topped" his previous work. Yet this time, with Rodgers providing an entire floor of MiTRIX video as a canvas, Terrell branched out into uncharted territory.

During "Life is a Highway," the group literally performed on a video highway that rolled smoothly down the stage under their feet. During "Stand," they were playing on concrete. At other times, the floor ranged from abstract shapes, to waves, to streaks reminiscent of a Jackson Pollock painting. Yet the most realistic illusion was when they

sang on the tops of clouds—a signature Terrell moment. With video surrounding the audience and the band performing in the midst of Terrell's imagery, this was clearly a concert in which the so-called "cheap" seats actually had the better view of the entire 3-D experience.

### Pixel precision

Using Apple's new ProRes 422 codec, the video for each song was output from Final Cut Pro as an HD QuickTime file, transferred to the show's video servers, and routed through the I-MAG video system to multiple LED destinations—with 1:1 pixel precision.

The tour's video director and chief engineer was I-MAG's Keith Lavoie, the technical wizard behind the video for the *Me and My Gang Tour*. Here, his backstage hardware realm consisted of Doremi and Grass Valley Turbo servers, video routers, Barco's Encore Presentation System, and multiple Barco DX-700 and D320 LED digitizers.

Yet the key was Barco's Director Toolset, a software application that enabled the digitizers to map video pixels onto LED pixels. The application excels at mapping non-standard shapes—squares and rectangles are easy, but thunderbirds are not. The same HD video was routed to each digitizer, but the Toolset pulled out precise pixel regions, based on Terrell's mask. In this manner, one file was distributed to multiple regions in the arena.

"The show's a little more complex this year because of the type of product," said Lavoie. "We're using a system that allows us to put images in different places. Charlie did a great job on the content pre-production, and that saved us a lot of trouble. He hands me an HD QuickTime file, which plays out from his system," explained Lavoie. "I transfer that uncompressed to the Doremi, with a compressed backup on the Turbo.

From there, I pipe it out to the various destinations on stage, and trigger it from my laptop."

Lavoie had a video crew of five assisting him on the tour: Brian Ress, Colin Johnston, Eric Wallace, Mike Drew Jr., and Evan Smith. In any case, his key to technical success is straightforward. "It's the guys that are doing it," said Lavoie, "the video crew, the carpenters and riggers that put the set pieces together, and the miles of cables that have to be assembled exactly the same every day. It's the guys that put it together."

As a vital part of the team that produced last year's tour, the lighting designer Andy Knighton was once again collaborating with Rodgers and Terrell. Knighton works for Bandit Lites, the tour's lighting supplier, but is exclusively assigned to Rascal Flatts. "Bruce and I, we'll talk four to six months in advance," said Knighton. "He'll give me his ideas, he dictates the visual structure, but allows me carte blanche with fixture choice and programming. He knows that he can trust me enough to be disciplined with all the toys he's given me."

In addition to the 544 X-Chip LED modules, Knighton used 50 Vari\*Lite VL3000s, 24 VL2500s, 24 Martin Professional MAC 2000 washes, six 4.2K Syncrolites, seven Lycian M2 spotlights, and nine 9-lite Maxi Brites (two of them with Wybron scrollers), all controlled by two MA Lighting grandMA consoles, with three grandMA NSPs. As Knighton admits, his skill is in taking a little and making it look like a lot. "There are many groups with much more gear than this," explained Knighton, "but with this amount, you can actually pay more attention to your exact spacing, so all your peels are symmetrical."

On last year's tour, Knighton's task was to complement rather than overpower the mother ship's video. The same theme was at play once again, but here there was also an elegant interplay between lighting and

video. When Terrell's content was subdued in a particular song, Knighton's lighting took center stage. "I have enough horsepower to light the guys, so that they don't disappear into the set or the video," said Knighton, "but when the video goes away, I can paint the façade with gobos, include the crowd, and make them feel that they're onstage."

"Charlie and I talked about color palettes a few years back, and it's ironic that we use very similar color schemes. If he's doing something that I'm colliding with, all I have to do is alter the palette, go to the other end of the spectrum, and then complement it.



"When I program, I look at the set," adds Knighton, "and I program for tones and movement, so as not to take away from the performers. And, by being a little disciplined, when I finally do something killer, it's obvious—instead of wearing you out with the constant 'big' look. I feel the colors, based on what I'm hearing, and based on the attitude of the song."

Knighton strongly echoed Keith Lavoie's thoughts about the crew. "Everyone's got the same gear, the same product, but it's this group of people, your network of touring personnel, that makes me hungry to come back. We're not department-stingy—we're show-oriented and



Pyro for the production was supplied by Pyrotek.

tour-oriented.” He also had high, and humorous, praise for Rodgers: “Well, let’s look at the skill that guy has, right? He just goes to bed, lies down, closes his eyes, wakes up, and draws it out on a napkin. The next thing you know, you’re hanging it.”

### “Think tanks” of professionals

Scott Bishop, account representative for I-MAG Video in Nashville, was instrumental in arranging the logistics required to acquire, configure, test, ship, and install the tour’s massive video system. He’s worked numerous prior tours with Rascal Flatts, Reba McEntire, Nickelback, and many others, but this is by far the largest he’s done. I spoke with him about the challenges of mobilizing this much equipment.

“Video is becoming a very large part of every show at this caliber,” said Bishop. “You can change your scenery per song easily, just because its video, from a rainy day to a cloudy day. But for the people that put the set in each day, if you take their input on how to do things faster, you create small think tanks of professional

people, and you usually come up with very creative solutions.

“People push the envelope, and when you do that, you get a better product,” continued Bishop. “Charlie disperses the content very well, and he connects all the video elements together. And when you see this show, with the dice, the wings, the elements, you’re not just looking at artists, you’re looking at artists doing great work.”

“We’ve had great support on this show,” said Bishop, “from the software to the technical guys. It was a huge order on a short timeline, but supporting the product is what it’s all about. With applications this big, it’s good for everyone: Barco, I-MAG, Rascal Flatts, Bruce, everybody.”

Clearly, the *Still Feels Good* set was purpose-built for a number-one act—and, as Doug Nichols notes, the band continues to rack up statistics: The only country group to ever have three singles with a million-plus digital downloads, the number-one digital selling artist for all genres in 2006, and the largest debuting record across all genres.

“We have another album coming out in September,” said Nichols,

“which is greatly anticipated. Because of the things that have happened, the entire music world will be watching this time. We went under the radar in ‘06, and everyone was like, wow, where did that come from!”

Nichol’s concluding thoughts on the band’s success were very insightful: “There are multiple layers of reasons—and some of it is because of digital access—but, from a touring aspect, the one thing that you can never digitally download is the excitement of being in that arena when the show’s going on. And that’s why we put a lot of emphasis on the live show. I don’t care what kind of equipment you use, you can’t click on it and re-create that energy.”

My hope is that the same collaborative and creative team will re-group once again for Rascal Flatt’s next tour—Rodgers, Terrell, Lavoie and Knighton. The question is, Mr. Rodgers, can you top this? 🎸

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