

PEDG Rocks the
iHeartRadio Music Festival
& **NFL Kickoff**

*Doug "Spike" Brant,
Justin Collie, and David
Hunkins are typical scenic
and lighting designers
who work long hours that
straddle day and night.
But there is nothing
ordinary about the
results they achieve for
Performance Environment
Design Group LLC (PEDG).*





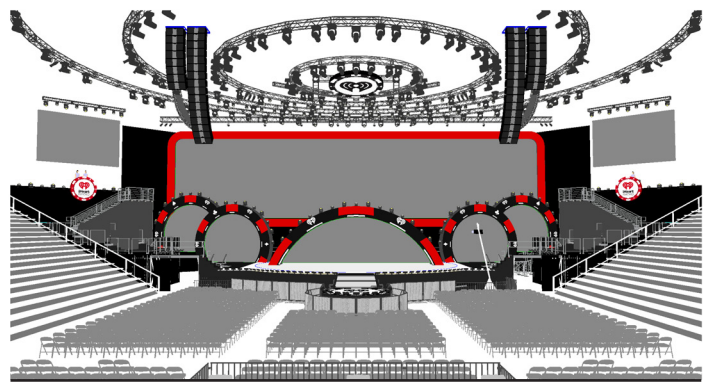
PEDG uses the Vectorworks Designer program to manage all aspects of production, including occupancies, as well as scenic, audio, and video elements. Courtesy of Brian Friedman for iHeartRadio.

Their transformational designs have yielded industry accolades, including the Telly Award, Eddie Award, and Tour Link Top Dog Award for lighting design, and their success has taken them from the NHL Winter Classic, Pepsi Fan Jam, and MTV's Iggy Awards, to A-list concerts, and more. Complementary offices in Lancaster, Pennsylvania and Los Angeles help PEDG delight and inspire audiences with their powerful, artful landscapes of light, fabric, video, and sound. Plus, their attention to detail and quality work mean they are tapped again and again by the same clients, including the enormously popular iHeartRadio Music Festival and the primetime NFL Kickoff event.

Attention to Detail Yields Successful Festival

When PEDG was asked to plan Clear Channel's 2012 iHeartRadio event at the MGM Grand in Las Vegas, it was almost impossible to imagine topping the previous year's show, touted as the "biggest live music event in radio history." But top it they did.

The 2012 show featured 22 world-famous musicians who graced the stage for two nights, including Green Day, Rihanna, Miranda Lambert, No Doubt, Bon Jovi, Usher, Aerosmith, Brad Paisley, Mary J. Blige, Enrique Iglesias, Pink, and Taylor Swift. These powerhouse performers were scheduled to play to a sell-out crowd of 15,000 each night, as

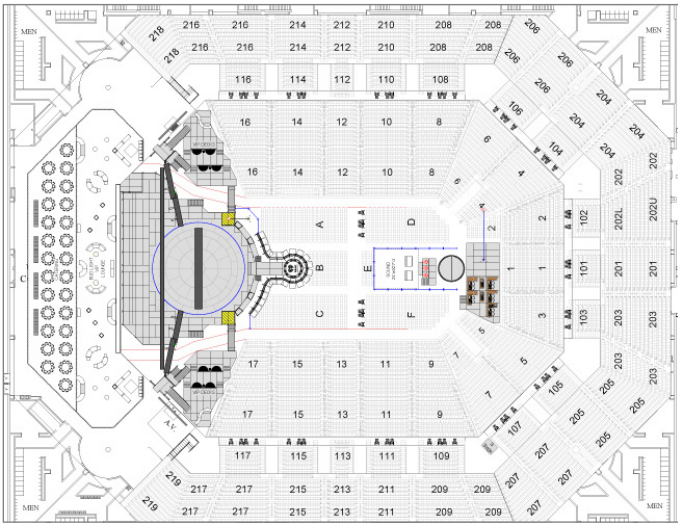


A perspective sketch of the stage provided a great orientation for designers working on the show.

well as to a wider audience through a simultaneous webcast, radio broadcast, and two-hour special for the CW Television Network, so they required an equally powerful set.

In the midst of getting the iHeartRadio event off the ground, the PEDG team faced several challenges, starting with the sheer logistics of accommodating so many top-tier artists. They also strove to improve upon the previous year's show with a similar budget. Additionally, the team lost three installation days because the tight timeline didn't allow for enough time to scale the show.

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Front of House (FOH) resources—yet another use for Vectorworks software!

Using Vectorworks® Designer software, in conjunction with a few other applications, PEDG hurdled these roadblocks by coordinating the artists' needs and finding places to save money to meet the budget. Hunkins says, "It's really the timeline of that show that is the most challenging thing. What I do more than anything else is to try to figure out how to install the elements." Contending with incredibly tight deadlines also means that a misstep can back up the entire project. If one piece doesn't fit, it can delay the next 20 trucks of gear that are set to pull through the door in the next two hours. The details have

"Our job was to design a show that would be hugely successful, and the organizers wanted to make it better this year than it was the year before. That's what we did."

--Spike Brant, Scenic and Lighting Designer, PEDG

to be exactly right for things like ensuring the chains are hanging in the right spot, so they can connect to the truss properly, or confirming that the lights are hanging in the right spots with the right amount of cable. The team spends a lot of time in the CAD program ironing out these details. Brant recalls, "While the set was very difficult to install, the key to success was the quality of the drawings—being able to figure out and resolve all of the conflicts before we got there—and Vectorworks was definitely helpful."

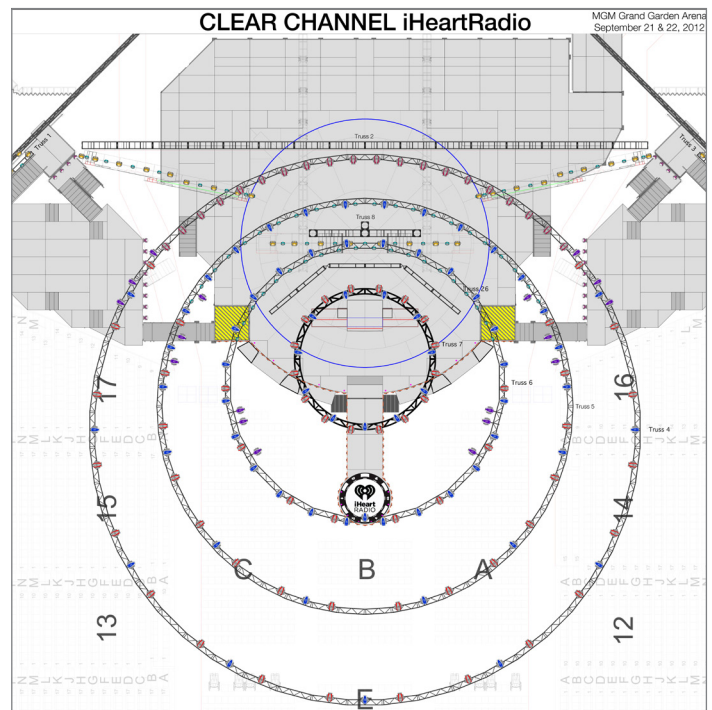
PEDG worked their magic, beginning with AutoCAD® drawings it received from the MGM Grand. But discrepancies in the file led the team to travel to the site to measure it themselves. Once they created accurate drawings in the Vectorworks program, they were happy

to have the venue's well-designed spaces and nicely orchestrated logistics for transporting elements in and out, as well as the rigging and 75-foot ceilings that retracted for easy building.

Brant, Collie, and Hunkins use the program to manage all aspects of production, including occupancies, as well as scenic, audio, and video elements. "Vectorworks is a little more intuitive than AutoCAD and is one of our key software components," says Brant. He and his team produce drawings to communicate requirements, as well as the paperwork to quantify the components and calculate weights, power loads, and patching. Regardless of the project, Hunkins' goal is always to produce a complete document that he can hand to anyone, giving them everything they need to know to build a show. "I even started putting in humans as symbols, which is a little bit weird; but you know, humans cost money and all things are calculable," he laughs. Hunkins strives to calculate every detail, including the amount of tape required to label all the cable he'll need to build a show. It's a ton of detail but adds up in terms of time and money saved. "There are a hundred steps that occur in a day when laying out a show, and if you don't need to manually do them, you've just gotten three hours back," he adds.

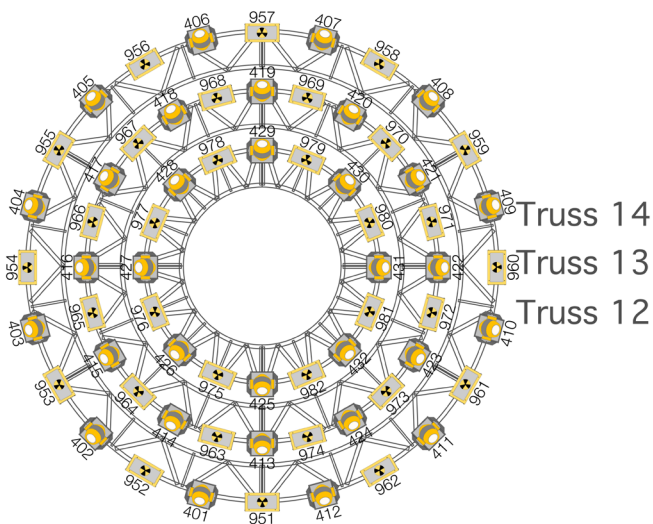
Getting Down to Business

As the overall project manager, PEDG generated all of the documents for the crews helping to build and set up the festival. "Vectorworks was useful to get all the information in one place, and it really allows you to check things and make sure that they all interface properly," says Brant.



The light plot shows the types and locations of the lighting fixtures.

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This detail depicts 64 moving light fixtures assigned for the same purpose: so the designers could make extravagant light side shows at each DJ location.

Visualizing the space in advance made the setup move smoothly, and the Vectorworks program is central to helping the team measure and produce symbols that are accurate and take up the right amount of space, and identify any obstacles beforehand. This meant the team could deliver the scope and performance caliber of a GRAMMY®-level show, which typically takes two weeks to build and rehearse. PEDG's design for the iHeartRadio set was built in three days. Rehearsal took place on the fourth day, and the concerts were on the fifth and sixth.

The PEDG team spent a lot of time designing the rigging, which was crucial because more than 200 motors ran the show. Hunkins and a colleague created incredibly complex symbols. When they inserted a point in the drawing, it included data on all of the materials they'd need to hang that point with a worksheet calculating materials, elevation, cable length, point weight, and more. "We didn't have much time," recalls Hunkins. "But in very short order, we were able to lay out the rigging and produce the documents, and my colleague could take that and hang the show. The tools in Vectorworks software help me do a lot of work very quickly, customize the elements, and control how they function, which allowed me to put my cursor on it and have it function the way I function in the real world."

"Walking through all of these drawings in 3D and having them as detailed as possible allows us to do a GRAMMY-level show in terms of size and certainly in terms of performances."

--David Hunkins, Design Associate, PEDG

Brant is thrilled about how the iHeartRadio show came together. "It was an amazing challenge in the fact that we were able to work with all of the different acts to a great extent, meeting their needs while also meeting the needs of our client, the radio station. Everyone was completely over the moon and happy, from the artists to the radio station. It was a success."

NFL Kickoff 2012: A Whole New Rockefeller Center

A mere two-and-a-half weeks before the iHeartRadio Music Festival, PEDG pulled off another equally amazing set with the NFL Kickoff, an event the firm has designed multiple times. Marking the official start to the professional football season, this event has traveled the country since 2002, and celebrates the previous Super Bowl winner's hometown. In 2012, singer Mariah Carey and band No Doubt made the show a hit.

By day, the backdrop for the NFL Kickoff 2012 was world-renowned Rockefeller Center in New York City. By night, however, it was a world unto itself. A number of unwitting bystanders witnessed the transformation of this iconic place, from a deep plaza surrounding the statue of famed Greek Prometheus, to a dramatic space that elongated the buildings with



PEDG's NFL Kickoff set design created a dramatic space that elongated the buildings of Rockefeller Plaza framing the famed Prometheus statue and featured a stage flanked by huge television screens. Courtesy of Meteor Tower.

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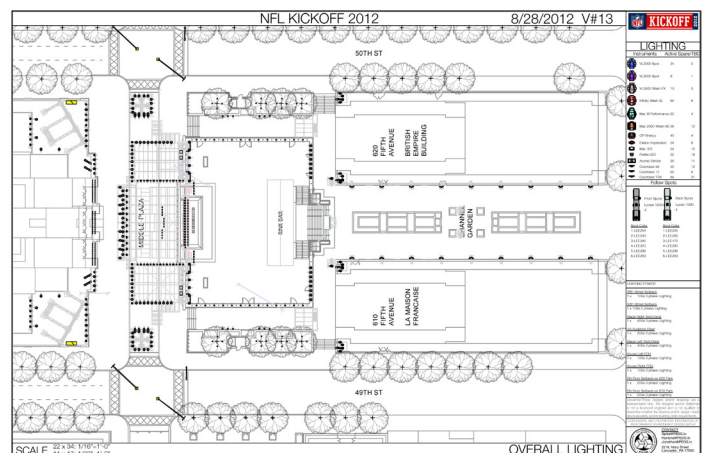
The backdrop for the NFL Kickoff 2012 was world-renowned Rockefeller Center in New York City. By night, however, it was a world unto itself where NFL-logoed lights beamed onto the buildings beyond in dramatic fashion. Courtesy of Meteor Tower.

a granite-like wall that framed the statue and featured a stage flanked by huge television screens. NFL-logoed lights beamed onto the buildings beyond in dramatic fashion, yet much of it looked like it just belonged there. "Seeing all the tourists look at the installed set and not realize that it was an installed set was neat," says Brant.

The PEDG team worked closely with Rockefeller Center owner Tishman Speyer to complete the transformation. Since the space was hollow, designers had to conform most of their sets and lighting to weight restrictions of 100 pounds per square foot (a few places could hold 300 pounds per square foot). The PEDG team produced many revisions as they worked within these limits. They also needed to ensure that everything on stage, as well as backstage, looked great for the broadcast show since the set could be viewed from many different angles. Additionally, their loading times were limited to nighttime hours, and they were directed to remove extra pieces each day because the operators wanted to keep the site clean. The team also contended with the minutia of making a piece of scenery that would fit into a relatively uncontrolled environment with unlevelled ground and asymmetrical objects.

As the team got started, it learned there were no accurate drawings of the space, so they measured it themselves. The tolerances were low, and they were building elements that needed to be highly accurate. The

PEDG team conducted elevation surveys in the middle of the night and plotted them out in Vectorworks software. They also created detailed drawings of the uneven surfaces, so that they could see exactly how the scenery needed to be cut. Overall, they produced hundreds of renderings, and all involved parties would discuss them in the evenings. Designers then worked overnight and confirmed changes in the morning. By the afternoon, full rendering sets were in the hands of three different



As the PEDG team got started, they learned there were no accurate drawings of the space, so they measured it themselves, ensuring the subsequent accuracy of all its plans.

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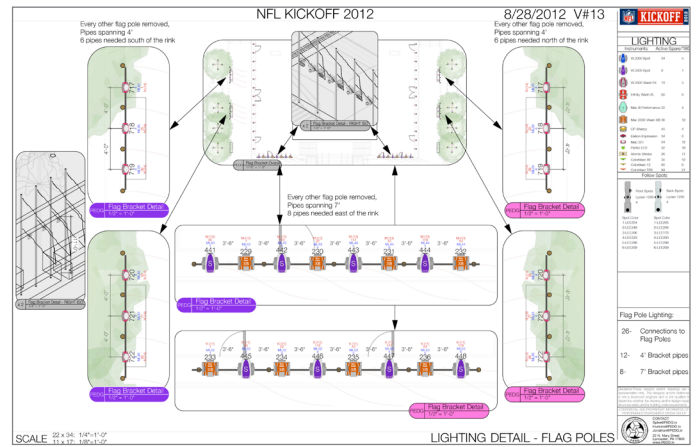
“We’re not just a lighting design company—we do much more. We’ve only gotten this far because we use Vectorworks Designer.”

—David Hunkins, Design Associate, PEDG

NFL clients: Marketing, Special Events, and the NFL itself. The result? PEDG created scenery that was highly integrated into the space; the stage touched the ground and walls, and ran up and over doorways, the fountain, and even Prometheus.

“Without Vectorworks software, all those parts wouldn’t have come together; it could not have happened,” Brant claims. Hunkins adds that producing a picture to share with all three groups and creating a dialogue was “the most powerful tool we got out of the Vectorworks program.” The PEDG team created all 64 of the detailed drawings in sheet layers, isolating each location and producing all of the views of each truss while noting how they needed to be built. The plans were within a quarter-inch tolerance.

Pennsylvania-based scenic and lighting production group Atomic helped build the set. “We exchanged very complex scenic symbols and elements through Vectorworks without any headaches,” says Hunkins. “We simply pasted them in place. It was all perfectly organized, and there was never any confusion. That level of organization, as well as the ease of taking bits and pieces and just dropping them back and forth, was tremendously useful.”

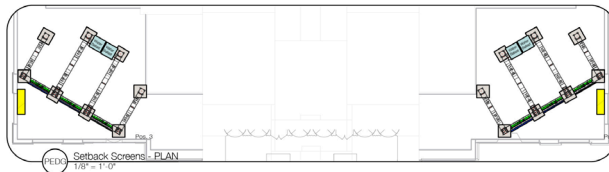
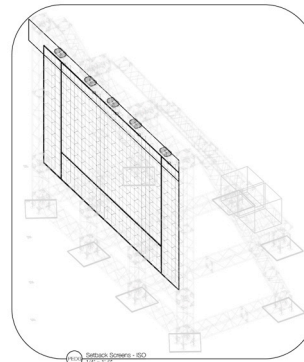
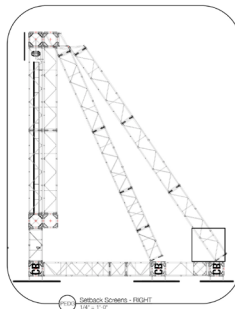
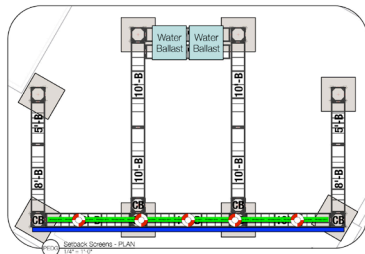


The lighting detail of the flag poles makes extensive use of cropped viewpoints in the Vectorworks software.



Since the space was hollow, designers had to conform most of their sets and lighting to weight restrictions of about 100 pounds per square foot, all while ensuring that everything on stage and backstage looked great for the broadcast since the set could be viewed from many angles.

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KICKOFF	
NOTES:	
A: Setback Screens x 2	WinVision 8mm: 180 Tiles Each 187 x 107 Screen dim: 20' x 15'4 1/2" 737,280 Pixels at 1152 x 640 Appx. 6480 lb.
B: Main Screens x 2	WinVision 8mm: 63 Tiles each 57 x 77 Screen dim: 16'6" x 12'3" 256,048 Pixels at 5/0 x448 Appx. 2268 lb.
C: Ribbon Screens x 2 Front	WinVision 8mm: 32 Tiles each 187 x 27 Screen dim: 29'4 3/4" x 3'8" 131,072 Pixels at 1024 x 128 Appx. 1152 lb.
D: Ribbon Screens x 2 Onstage	WinVision 8mm: 48 Tiles each 247 x 27 Screen dim: 44'1" x 3'8" 186,008 Pixels at 1536 x 128 Appx. 1728 lb.
E: Casted Floor Screen x 1	WinVision 8mm: 120 Tiles each 307 x 41 Screen dim: 50'1 1/2" x 7'4" 491,020 Pixels at 1536 x 256 Appx. 4680 lb.
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This LED screen detail uses image graphics, multiple projections, and rendering of the 3D model to tell the story.

In the course of a day, collaborators would pass a piece of scenery back and forth about 20 times; the next day, Atomic would cut the material and build it.

The result was a transformation that met the needs of the event and worked seamlessly with the existing venue. During the project, Brant overheard some maintenance workers talking about the stage that was going to be placed there. But the fact was it was already there. These people had worked at Rockefeller Center for 30 years and couldn't see the difference. And that was the entire point.

As the PEDG team continues to suspend an audience's (and maintenance workers') disbelief by creating worlds that simultaneously blend in and stand out, they'll continue to provide entertainment experiences that won't soon be forgotten.

Acknowledgements

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