



LIVE ON EASTER SUNDAY



Above: The set's scaffolding held many of the production's musicians. Left: The fresco walls parted to make a backlit cruciform space.

How *Jesus Christ Superstar Live in Concert* took a different approach to broadcasting live musical theatre

By: David Barbour

he still relatively new genre of live Broadway musicals on television got a shot in the arm on April 1—Easter Sunday—when NBC presented *Jesus Christ Superstar Live in Concert*. The production benefited from the fact that the piece is through-composed, allowing the cast to leap from one hit tune to the next, and the presence of a live audience kept the energy level pumping. And a sizzling cast, led by John Legend as Christ, Broadway's Brandon Victor Dixon as Judas, and Sara Bareilles as Mary Magdalene—not to mention a scene-stealing cameo by Alice Cooper as Herod—delivered the numbers with brio. Adding to the excitement was a powerful production design aided by sterling audio and perfectly calibrated camerawork; every-

one collaborated to deliver a show that filled social media with favorable comments.

Part of the show's success lay in the fact that, in many ways, the design team took a markedly different, more unabashedly theatrical approach. In preserving what makes *Jesus Christ Superstar* exciting theatre, they guaranteed an electric television experience. It also restored the feeling of provocation associated with the piece when composer Andrew Lloyd Webber and lyricist Tim Rice released it as a concept album in 1970.

Interestingly, the production was staged not in a television studio but in the Marcy Avenue Armory, also known as the New York State Armory, in Brooklyn. Jason



Gurdon used Claypaky Scenius Unicos to create a “God light” streaming through the ceiling of the set.

Ardizzzone-West’s set represented an ancient crumbling church structure, covered with scaffolding. The designer says that David Leveaux—the production’s co-director, with Alex Rudzinski—kick-started the design in their early conversations: “The venue was already selected by the time I got involved. David had the idea of setting it in the present, but also evoking an ancient, almost timeless religious past, while acknowledging the armory building and the live audience. We talked about it being part rock opera, part rock concert, and part musical theatre, as well as an art installation and television broadcast. The idea of creating a series of fragments of an ancient chapel in the armory space came from the operatic part of my brain; pinning the pieces together with a scaffolding system was evocative of archeological sites, but it also gave it a rock-and-roll texture, especially rock concert staging of the 1970s.” The challenge, he adds, was to bring all these elements together into one shared space.

Providing historical context, the walls of the church set were covered with the crumbling remains of religious paintings. “They were mostly taken from Giotto’s frescoes

from the early 14th century,” Ardizzzone-West says. “The frescoes look as if marked by destruction by humans and war and degraded by the elements. The live spraying of graffiti, on top of that, brought us up to the present day.” In one especially striking moment, during the overture, a performer ran up to the wall and spray-painted Christ’s name with a retrofitted fire extinguisher. The designer adds, “The level of attention paid to the painting—its texture, aging, and also its desecration—was significant. We knew it would be seen close-up, in high definition.” The set was built by PRG Scenic Technologies (Mark Peterson, director of projects; Benjamin Lampman, senior project manager; John Van Arsdale, project manager; Harmony Water, art department team leader) and painted by Newburgh, New York-based Scenic Art Studios (Joe Forbes, president; Debra Forbes, VP / charge scenic). “In the armory, our scenic department (led by Julia Torrant), tweaked colors for the camera, heightening certain details, and pulling everything together.”

The extensive scaffolding, Ardizzzone-West says, “was probably the most challenging piece of the design, in



Ardizzone-West's set consisted of fragments of an ancient chapel, degraded by war and the elements.

terms of trying to keep the original vision, from conception to execution. It became a major engineering and architectural project that had to comply with certain codes; engineers had to review it and sign off on the structure. The art department did extensive 3D modeling of the scaffolding, in order to save time; they knew it would be a large logistical challenge. It was a hybrid; we wanted to remove certain elements, replacing them with specific pipes and clamps that suggested a more timeless form of scaffolding. Mountain Productions provided a customization that made the engineers comfortable and fit with what I wanted." He adds that it was important that the 32 musicians, who were spread out on various levels, also felt safe with the arrangement.

Although the loudspeaker system was rigged out of camera view—more about this later—Ardizzone-West says, "We sort of leaned into fitting the technology of the live concert into the design. If you looked closely at the scaffolding, you'd start to notice antennas and video monitors for the musicians. We weren't trying to hide the technology, although we had a conversation about how to incorporate

it. We kept the speakers out of the camera shot, but we didn't shy away from showing the guitarists with their pedals and such. I liked the idea of incorporating them into the world of the design."

The most spectacular effect came near the end of the show, when a church wall separated into four pieces, creating a cruciform space, defined by a burst of white light, into which the crucified Christ receded. It was a simple, yet bold, gesture, that created the right note of awe. "David and I were already talking about that idea at our first meeting," Ardizzone-West says. The designer's research had led him to photos of Church of the Light, designed by the architect Tadao Ando, in Ibaraki, Japan, in which the wall behind the altar "has a very simple cross shape made by the negative space between poured concrete," allowing morning sunlight to pour in. "We weren't sure how to incorporate it, but we knew we wanted to have Jesus disappear into a cross of light." The flying system was designed and installed by Flying by Foy; PRG handled the scenic automation.

The other key element, Ardizzone-West says, was the

audience, “which became part of the set. It was, really, an architectural component. I used to be an architect, and I have designed theatres; we had 1,300 live bodies and needed to figure out their relationship to the world of the design, how present they would be, both on camera and as part of the experience. Two sides of the set consisted of broken frescoes and scaffolding, with the audience on the other two sides; one side functioned as the mosh pit.” In one notably theatrical moment, Christ made his first entrance, along the set’s downstage edge, slapping audience members’ hands and taking high-fives. It was a pertinent bit of staging in a musical that contemplates Christ as a celebrity in his own time. “I think that, even when we didn’t see or hear the audience on camera, the energy that they gave back to the actors helped to set this production apart.

“It was, in the end, a process of simplifying the design to the bare essentials,” Ardizzone-West says. “What did we need to tell the story? David was onboard with, for example, not having stuff actually being traded in the temple scene,” when Christ angrily turns out the merchants who are defiling a place of worship. “We wanted to create a singular space in which this moving story is told, letting the cameras and lighting change the scene. It was all about simple, theatrical gestures—which, of course, is never really simple.”

The rest of the art department included Melissa Shakun

(art director); Melissa Miller (art department coordinator; Emily Kollars, Tijana Bjelajac, Jeff Hinchee, Warren Stiles, Daniel Soule, and Evan Alexander (assistant art directors); Emiliano Pares (outside props); Will Sweeney (Local One prop head); and Devon Adams (PA).

Lighting

Lighting designer Al Gurdon has plenty of experience in this genre, having designed *Grease Live!* and *A Christmas Story Live!* (As most readers know, he also has an extensive career lighting televised special events, such as the Eurovision Song Contest, MTV Music Video Awards, Super Bowl halftime shows, and Olympics opening and closing ceremonies.) Compared to the two musicals mentioned above, *Jesus Christ Superstar Live* offered certain advantages. “It was all done in one venue, so we could rig anywhere in the building,” he says. “It was a very different approach. I think we had 19 sets for *A Christmas Story*, spread across several locations on the studio backlot. Here, we had much more centralized control.”

Gurdon’s lighting performed triple duty, treating the architectural details of the set, reshaping the set for each scene, and providing rock dynamics and/or spectacle when the occasion called for it, such as in “King Herod’s Song,” “Simon Zealotes,” and the title number. “The thing I like about these projects is the way that different disciplines converge,” he says. “It’s always a pleasure to work





Left: Philips Vari-Lite VL3500 Spots were used to create squares of light for the confrontation between Judas and the high priests. Above: Dittmar notes that every single performer was on in-ears; he praises JH Audio for getting 34 molds done in less than a week.

with directors whose comfort zone is different from my own, because the live televised musical form itself is a hybrid, drawing on people from different disciplines; I think we all learn something from each other.”

Gurdon’s work of reconfiguring the stage and establishing the tone of each scene was central. “Working more in televised events than anything else,” he says, “this was a great opportunity to explore a more theatrical type of lighting, rather than creating spectacle above all else. I really enjoyed getting to interpret the script and music in an emotional way. Approaching *Jesus Christ Superstar*, I started at first with a similar mindset to my approach to *Grease Live* and *A Christmas Story*. When I started programming, however, I realized that there was an opportunity to be more expressionistic and less naturalistic, and to respond to the staging as it developed in a less literal and ‘motivated’ way. The production being all in one space gave me the chance to work more flexibly. If you’re outside on the backlot, it’s not that easy to simply drag in a light from another angle, to make a look work.”

Like his colleagues, Gurdon wrestled with how much he should expose the technology. “I was keen to hide the

source as much as possible while still getting the kind of dynamic that was necessary for a show that is musical all the way through. I constantly had questions. A number has a strong beat: Does it need traditional rock dynamics, or should I treat it as drama? In each case, the answer wasn’t clear-cut. It would be tedious to watch the whole flashing and banging for two hours. If you use restraint and only do that when you really need to, it has much more impact.”

Among the workhorses in the lighting were a set of 75 Philips Vari-Lite VL3500 Spots. “I used them for key light and framing, which we did a lot. For example, in the scene in which Judas takes his blood money from the high priests, we framed a square of light over each priest’s position, and then brought it down so it was only on Judas in the center.” This effect was picked up by a very effective overhead shot. The backlighting of the scaffolding was accomplished using 64 VL3500 Washes. “I wanted to get a hard, shadowy look, so I needed to use directional units; the VL3500 Washes were great for this. When I started looking at focusing through the scaffolding, I found so many cool possibilities for angles and shadow-making; spooky, hard, aggressive looks for the priests and for the

guitarists, standing in a doorway. It was very much part of the original concept to show the building and to include the audience.”

For the single-color washes that defined certain scenes, Gurdon employed a set of 38 ARRI S60-C Skypanels. “They’re fully color-controllable,” he says. “I started using them on *A Christmas Story* and I really enjoyed the color control I had.” He adds that in a production such as this, when time is short, and decisions have to be made quickly, the ability to swap out one blanket color for another was extremely useful. “We lit the frescoes using a combination of the Skypanels, for the base color, and VL3500 Profiles if we needed to add something more.” When a cast member spray-painted “Jesus Christ” on the wall, he used the VL3500 Profiles’ shutters to highlight specific parts of the wall.

“For big shafts of light, I used [29 Claypaky] Scenius Unicos,” Gurdon notes. “It’s the first time I’ve used them, and I was very happy with them. I’ve often been asked for the ‘Grand Central Station look,’ that famous image of sun streaming through the windows of the station in perfectly parallel shafts. We had to create an ethereal ‘God-light’ coming through the roof in different ways, at different angles and so on. At first, I intended to use a bigger array of lights to push beams through the holes in the set, but the Unicos gave me more control and flexibility. For example, I could tighten the beam in Sara Bareilles’ song, ‘I Don’t Know How to Love Him;’ I could also get smaller nuances of light that I couldn’t have achieved with other units.”

In flashier moments, including the title number, Gurdon put into play a set of 160 Vari-Lite VL5s, placed on lighting pods behind the stage-right fresco wall, which parted for the scene. He adds that he chose the VL5 because “of the analog quality of the tungsten light,” adding that the units “didn’t need to do as much as the Unicos.” They also create a kind of vintage, wall-of-PAR-cans effect that is suitable for the title song, with its old-time rock vibe. Also part of the wall of light were 60 Claypaky Mythos units and 84 Martin by Harman Atomic 3000 strobes with scrollers. “At the beginning of the song, when the wall opened, we needed ethereal white beams from the Mythos. But I needed the VL5s to get a big array of light, because of the slightly Vegas-y feel of the number, with Brandon and the backup singers in silver. It gave us a continuous wall of light and it had a kind of retro look, as well.” Christ’s first entrance was backed by a Scenius Unico, with VL5s lighting the apostles as they ran toward him. In addition to the Martin Atomics, Gurdon had 24 TMB Solaris flares to “give a flash in the background accenting beats highlighting certain moments without drawing attention to themselves.”

The tremendous burst of heavenly light featured in the crucifixion was created by an ARRI 18K HMI Fresnel with electronic shutters. “This effect caused me a couple of sleepless nights,” he says. “It began to gnaw at me that the payoff of the whole show relied on one unit, which is not necessarily bullet-proof. What would happen if it didn’t strike, if the ballast failed, if the bulb blew, or the mechanical shutters didn’t open? The whole ending of the show would be ruined. They generate an enormous amount of heat, which makes the likelihood of something going wrong relatively high, so we backed it up with a second 18K unit, also with shutters. We struck one of them two commercial breaks before the moment they were to be used; we checked the ballast, bulb, and shutters, and, in the last commercial break before the number, we struck the spare. By the time we got to that sequence, we had two working lights and working shutters. As soon as we cut on camera to the apostles, we killed the spare HMI Fresnel, because there was a lot of bounce off these very large units. As the walls moved back, forming a smaller cross, we had one Unico that was directly in its center. Gradually, as the camera zoomed in, we built the intensity of that light, fading it in; we did a glow effect on the camera, and used heavier [Tiffen] Glimmerglass filters to get a more blown-out look on Jesus. As the light was building up, the diffusions increasingly blew out the high-lights, the glow added to this, and the camera stop was being pushed as well.”

The lighting was controlled using two MA Lighting grandMA2 desks. “Kirk Miller programmed the whole show,” Gurdon says. “I had another programmer, Eric Christian, working with the 11 [PRG Best Boy HP] GroundControl remote followspots. It was a very high



One of the show’s glitzier moments featured Alice Cooper performing “Herod’s Song.”



The wall of lights was seen in the title number. Gurdon notes that he used such effects judiciously. "It would be tedious to watch the whole thing flashing and banging for two hours," he says.

priority to distinguish the principals from the rest of the cast and to give the thing a focus, without making it seem artificial. For example, in the beginning, when Judas was singing 'Heaven on Their Minds,' it was important that Jesus, Judas, and Mary were more prominently lit. There was a lot of complex followspot work that required level and color presets for every scene. Each scene was measured, because the spots would be at different distances and the colors would be different as well. Eric followed the show, bringing up programs and intensities and colors. Ben Green called followspot ops. The Local 4 followspot operators were amazing.

"The principals were a hundred percent followspotted, but I didn't want it to look like it," he continues. "We were always doing soft-edge blending, except in a couple of moments: One was 'Superstar' and the other was 'Simon Zealotes,' both scenes in which there was a deliberate stepping out of the naturalism of walking around being lit."

In addition to the gear already mentioned, the lighting rig included 10 PRG Best Boy HPs, 12 Claypaky Sharpys Washes, 12 GLP impression X4S units, 30 GLP X4 Atoms,

three Hungaro T-Light Pro strobes, 120 Chroma-Q Color Block 2s, two MDG theONE foggers, and about 1,200' of RGBW LED tape. The lighting gear was supplied by PRG.

Other members of the lighting team included Travis Hagenbuch and Ben Green (lighting directors); RJ Styles (gaffer); Chris Moeller, Steve Sitler, Ron Martin, and Bobby Tacoma (best boys); Matt Genezcko (PRG chief tech); Meg Flanagan (PRG lead tech); Keith Meola (PRG tech); and Daniel Hutchinson (Local 4 electrics house head).

Sound

Audio producer Mark Dittmar, vice-president of Firehouse Productions, designed the sound system. The first item on his to-do list was to deal with the acoustics in the armory. "We spent a huge amount of resources on the acoustic treatments," he says. "The room is 200' wide by 300' long; it's cavernous. Everyone wanted an open look, so we did treatments under the bleacher seating, along the walls behind the audience, but not where they would be visible by the camera."

As mentioned earlier, the plan was to keep the loud-



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speaker rigs out of camera view. "The PA was designed in very focused fashion on the audience," Dittmar says. "The finale ran about 103dB in the house, which is way louder than I would have expected it to go—and it didn't really hurt us on air. There were times when we had 36 omni mics on stage and we were still able to run about 90dB. There was a difference of about 20dB between the down-stage edge and 3' away, where the PA started picking. We

had an amazing amount of isolation."

He continues: "The PA consisted of three hangs of 14 JBL VTX V20s line array elements; each array had three VTX S25 subs in a cardioid arrangement. These arrays were laid relatively flat. Then there were JBL G28 subs under the bleachers. It was a mono PA system. I think the average listener was about 35' away from a PA box, which was pretty awesome. We put a huge amount of work into



making sure that you didn't see the PA. The bottom box of the first array was straight over the mosh pit, and they raked up from there; the bottom box was pointed straight down. Production wasn't completely against the speakers being seen, but my idea was to let the audience see the show, not the arrays. The subs were designed to hide from the camera, through the main PA: even if you saw the main PA from, say, the jib camera, you wouldn't see the subs."

He adds that he used JBL's VerTec Line Array Calculator simulation software to plan the layout of the rig.

The musicians included a string quartet, with acoustic and electrical instruments, a 20-member orchestra, and a 12-piece core rock band, the members of which wandered around the stage. "The string quartet and guitars were wireless, so they could walk around and be part of the show," Dittmar says. "Every single performer had custom in-ears, which was really awesome. JH Audio did a great job of getting 34 molds done quickly, turning it around in less than a week. The musicians, if not wireless, were on generic ears, headphones, or their own in-ears. The really interesting thing on-site was how we used the [Riedel] Bolero [wireless intercom]. The set was 40' by 130'; for a director to give notes to the actors would entail a lot of yelling. With the Bolero, we created multiple zones of communication for the directors, choreographer, and others. The musical director could talk to the orchestra, the band, the string quartet, or everybody at once. The director could talk to the principals, ensemble, or everyone. David Leveaux had a getting-used-to-it process; he would cue the cast, and say, 'Everyone raise their hand if you can hear me.' And you'd see everyone raise their hands. Communication on this show was massive, to say the least. We only rehearsed on-site for nine days, which is not a lot of time to put an entire Broadway show together. The audio department was broken down into sub groups for work flow and communications purposes. We occupied six or eight channels of comms."

Communication was the key to organization, which was central to this project, he says. "To get everyone mic'd each day meant that 105 wireless devices had to be checked to all the mixers. When they came in after a meal, we had to check their batteries, then get everyone remic'd and checked. It's a hell of a process. We got to the point where we could do it in 15 – 18 minutes." Most of the cast were mic'd with DPA d:fine 4066 omnidirectional headsets, with DPA 4061 mini-lavaliere on the principals for backup; everyone had Sennheiser D6000 wireless two-channel receivers. The performers were also fitted with Shure PSM1000 personal monitors. Handheld mics were Shure Axient Digital models.

Mic placement was especially discreet. "I've worked with the team that has done it on four shows, starting with *The Sound of Music Live*," Dittmar says. "We call them Broadway A2s. They bring a specific skill set, bending wire and using Hellerman tools to make sure the actors are comfortable."

Sound was controlled by four Yamaha CL5 consoles, plus a DiGiCo SD7 and SD21, a Lawo desk in the truck and a Studer for the main broadcast. "At the front of house, we had vocals on one CL5, handling 56 RF mics, another for the rock band, and another for the orchestra. Then we had a CL5 in a side room for several purposes,

the final one being it submixing the ensemble. This took the work flow of the ensemble off some of the other broadcast engineers. The Lawo MC562 in the Music Mix Mobile truck mixed the band and orchestra, with John Harris mixing. A DiGiCo SD7 handled monitors, with Mike Bove at the helm, and Luis Espinal monitored all RF mics using a DiGiCo S21. Tom Homes was the A1 and put everything together and mixed the vocals on a Studer Vista 8 in the All Mobile Video truck.”

When asked if these consoles were linked digitally, Dittmar replies, “We had 100% analog splits. If you go dig-

challenging. Normally, it would just be a piano player, but we ended up with a piano, drumkit, string quartet, guitars, and 22 wireless mics. It really got large, and fast. But it was good, because it meant that everyone was used to handling the mics. A major challenge we faced was the weather. We got hit with several days—primarily setup days—when we got blizzarded out. Soundcheck for audio was a Thursday, and on Wednesday the big storm hit, and everyone was sent home. Most of us stayed, and, being the only department working—usually there are over one hundred people working around you—



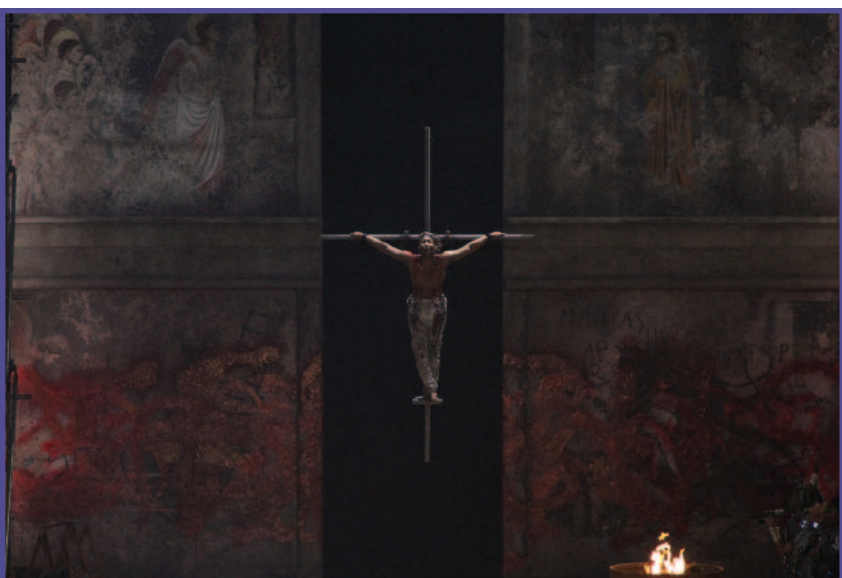
The arrest sequence; note Jesus' name, spray-painted on the set.

ital, you lose all the layers of redundancy and backup. Job number one is reliability. It does not matter how good your show sounds if it's off-air. Digital splits don't give you reliability; instead, they require very complicated ways of backing things up. We had multiple layers of backup. We could always take the front-of-house mix straight to the satellite truck, if necessary, or we could take the music submixes from the front of house and send them to the TV truck if the music truck had a problem. We had a very solid Plan B. Thankfully, we had no issues.”

Dittmar adds that “the off-site rehearsal process was

we got a huge amount done. We wouldn't have made soundcheck without that day. The soundcheck was a lot of work, but it was one of the most fun days I've had in a long time: Going through the rock band, orchestra, string quartet, then the individual vocalists, adding the rock band back in and the orchestra, working layers until we built up the full mix.”

Having earned great reviews and better-than-average ratings, *Jesus Christ Superstar Live in Concert* has seemingly invigorated its television genre. It is available to be seen at <https://www.nbc.com/jesus-christ-superstar?nbc=1>. 📺



Stations of the Cross: Three views of the crucifixion sequence, with its stunning backlighting effects.